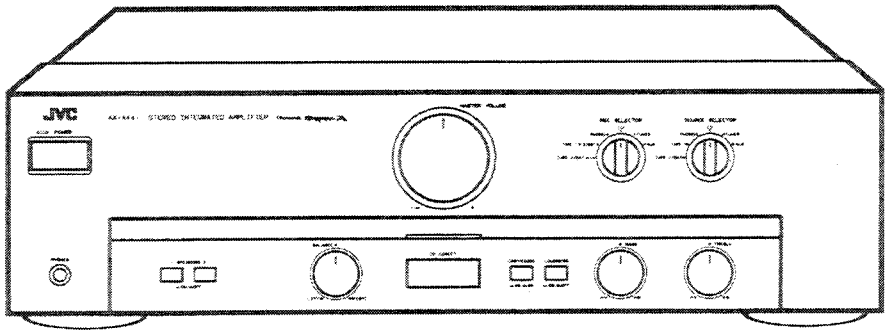
JVC

SERVICE MANUAL

STEREO INTEGRATED AMPLIFIER

AX-A441TN
MODEL No. AX-A442BK



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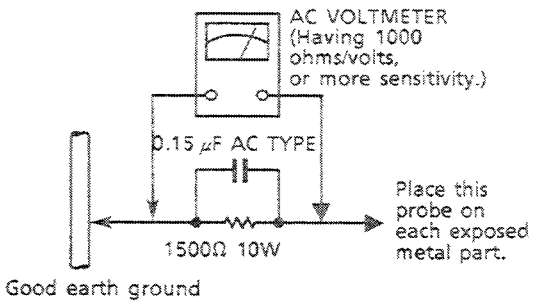
No. 20234
Feb. 1991

Safety Precautions

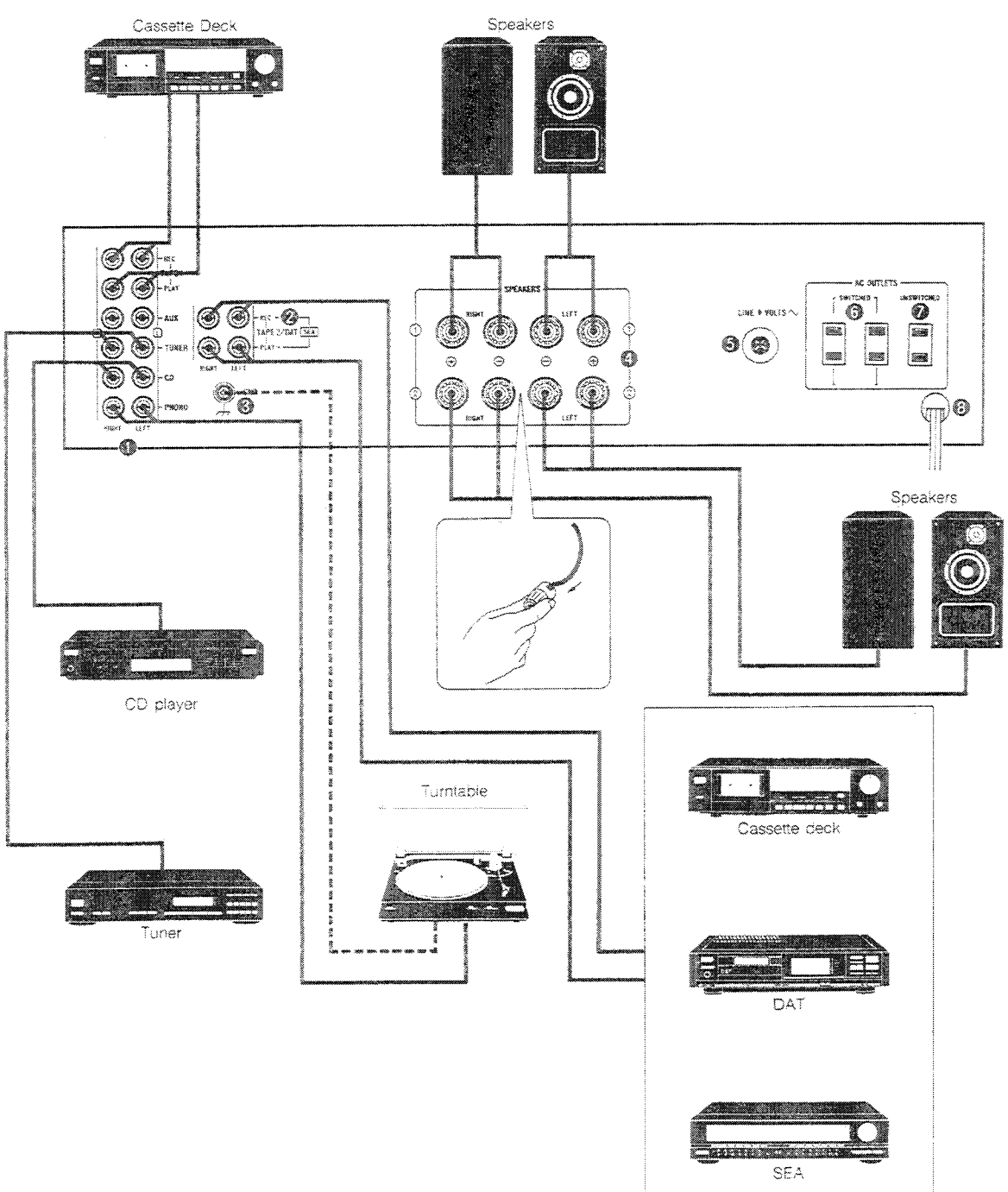
1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularily any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

CONNECTION DIAGRAM



REAR PANEL

❶ TAPE 1, AUX, TUNER, CD and PHONO terminals
❷ TAPE 2/DAT terminals
❸ GND terminal
If your turntable has a ground lead, connect it to the GND terminal.
❹ SPEAKERS 1, 2 terminals
❺ AC line voltage selector**
(LINE ↕ VOLTS ∿)
Set the voltage selector so that the arrow points to the appropriate voltage.
❻ SWITCHED AC OUTLETS**
❼ UNSWITCHED AC OUTLETS**
** Not provided on units for Continental Europe, the United Kingdom and Australia.
❽ Power cord

Notes:

1. **Disconnect the power cord when connecting any component.**
2. **When connecting components, make the correct left and right channel connections. Reversed channels may degrade the stereo effect.**
3. **Connect speakers with correct polarity: (+) to (+) and (−) to (−). Reversed polarity will degrade the stereo effect.**
4. **Connect plugs or wires firmly. Poor contact may result in hum.**
5. **Do not connect equipment requiring more than the rated power to the AC outlets on the rear panel.**
6. **Use speakers with the correct impedance. The correct impedance is indicated on the rear panel of the AX-A341TN/AX-A342BK, AX-A441TN/AX-A442BK.**
7. **The SWITCHED AC OUTLETS are switched off when the front-panel POWER button is switched off.**
8. **The UNSWITCHED AC OUTLET is not switched off when the front-panel POWER button is switched off.**
9. **An MC or MM cartridge can be used for the turntable connected to the AX-A441TN/AX-A442BK.**
10. **Do not connect video signals to the terminal of this unit.**

BEFORE USE

1. Installation

- Select a place which is level, dry and neither too hot nor too cold (between −5°C and 40°C/23°F and 104°F).
- Leave space between the rear of the amplifier and the wall. Good ventilation is needed, especially when the amplifier is driven at high output power. Also, leave space above the top of the amplifier for the same reason when stacking components.
- Do not allow a carpet, etc., to block the ventilation holes.
- Do not set it in a place subject to vibrations.

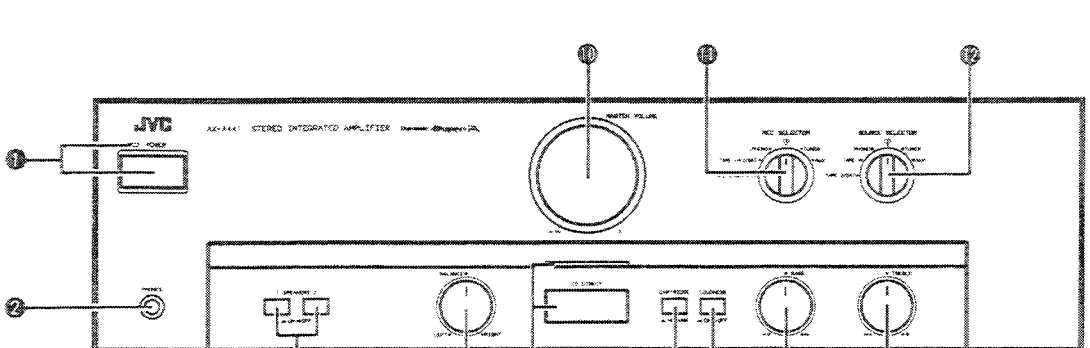
2. Power cord

- Check that the amplifier is set for your local supply voltage and frequency. If not consult the dealer from whom your bought it.
- When unplugging from the wall outlet, always pull the plug, not the power cord.
- Before plugging the power cord into an AC outlet, check to be sure the individual component are connected correctly.

3. Malfunctions, etc.

- There are no user servicable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object inside the amplifier.
- Do not allow water to get inside the amplifier.
- Set the volume at minimum, before operation.

FRONT PANEL



❶ POWER and indicator
Press this button to turn the power on.
To turn the power off, press it again.
The indicator lights when the POWER button is pressed to on.

❷ PHONES (Headphones jack)
Plug stereo headphones into this jack for private listening.
If you want to listen to sound from the headphone only, press the SPEAKERS button to "OFF".

❸ SPEAKERS (▂ ON ▄ OFF)
Press to switch the speakers connected to the SPEAKERS 1 or 2 terminals on (▂) and off (▄).

❹ BALANCE
Balances the volume between the left and right speakers. Usually set it to the center click position.

❺ CD DIRECT and indicator
Press this button to enjoy listening to the CD with good sound quality. The indicator lights and the signal fed from the CD terminals is directly connected to the volume, bypassing the circuits on the way, thus allowing you to enjoy listening to an improved sound quality.

Please note:
- **When CD DIRECT is on the amplifier gives priority to the CD player so that the CD sound is emitted from the speakers or headphones regardless of the source selected by the source selector.**
- **While the CD DIRECT button is pressed, spinning of the BALANCE knob does not change the reproduced sound.**

❻ CARTRIDGE (AX-A441TN/AX-A442BK only)
MC (▂): Press in when using an MC cartridge having an output of less than 0.5 mV.
MM (▄): Press again when using an MM or MC cartridge having an output of more than 0.5 mV.

❼ LOUDNESS (▂ ON ▄ OFF)
Press this switch ON (▂) to compensate for the ear's different sensitivity to sound at low volumes.

❽ BASS
Turn clockwise to boost bass response and counterclockwise to decrease it.

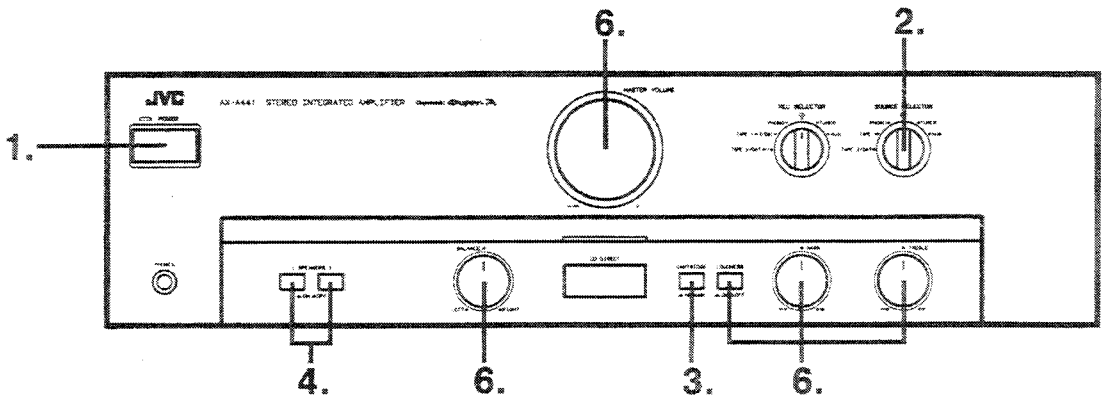
❾ TREBLE
Turn clockwise to boost treble response and counterclockwise to decrease it.

❿ MASTER VOLUME
Controls the volume of the speakers and headphones.

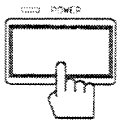
⓫ REC SELECTOR
TAPE 2/DAT ▶ 1: Set to this position to dub from TAPE 2 to TAPE 1 or to record DAT onto TAPE 1.
TAPE 1 ▶ 2/DAT: Set to this position to dub from TAPE 1 to TAPE 2 or to record TAPE 1 onto DAT.
PHONO: Set to this position to record PHONO.
CD: Set to this position to record CD.
TUNER: Set to this position to record TUNER.
AUX: Set to this position to record the source connected to the AUX terminals.

⓬ SOURCE SELECTOR
TAPE 2/DAT: Set to this position to listen to TAPE 2/DAT.
TAPE 1: Set to this position to listen to TAPE 1.
PHONO: Set to this position to listen to PHONO.
CD: Set to this position to listen to CD.
TUNER: Set to this position to listen to TUNER.
AUX: Set to this position to listen to the source connected to the AUX terminals.

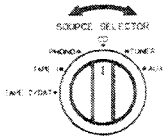
Listening to Sources



1. Turn the POWER on and the indicator will light up.



2. Adjust the SOURCE SELECTOR to select the source.

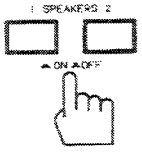


3. Set the CARTRIDGE as required. (for PHONO only)

Note:

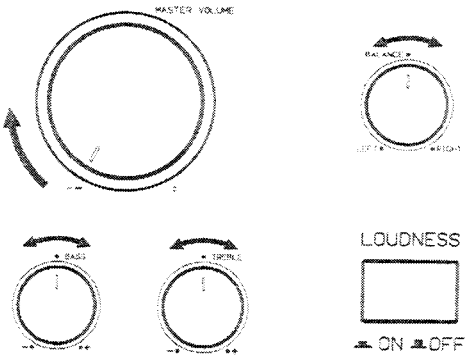
- **Unless listening to PHONO, above operation is not necessary.**

4. Select the speaker system with the SPEAKERS buttons.



5. Operate the corresponding equipment according to its instruction manual.

6. Adjust the MASTER VOLUME, BALANCE, TREBLE, BASS and LOUDNESS.



7. Use of S.E.A. Graphic Equalizer

By allowing you to independently boost or lower the response of finely divided sections of the frequency spectrum, the S.E.A. gives you much greater control over the sound quality of your stereo system. With an optionally available S.E.A. Graphic Equalizer, you can tailor the sound to your own taste for different types of music or to compensate for the particular acoustic characteristics of your audio components and listening room. The TAPE 2/terminals of the AX-A341TN/AX-A342BK or AX-A441TN/AX-A442BK can be used for connecting the S.E.A. Graphic Equalizer.

Note:

- **To tailor the sound using SEA, select desired source by the REC SELECTOR and adjust the SOURCE SELECTOR position to TAPE 2/DAT connected to SEA.**

TROUBLESHOOTING

What appears to be a malfunction may not always be serious. Make sure first . . . .

No sound and no light
Is the AC plug connected properly?
Are the connections made correctly?
Are the inter-component connections correct?
No sound from speakers
Are speaker cords connected?
Are the SPEAKERS buttons correctly set?
Is the VOLUME control properly set?
Is your source component correctly set?
Sound from one speaker only
Are speaker cords connected correctly?
Is BALANCE control set to one extreme or the other?
Loud hum during record playing
Is turntable grounded?
Try to change cord path.
Insert the plugs by interchanging their positions.
Howling noise during record playing
Is turntable too close to a speaker?

SPECIFICATIONS

AX-A341TN/AX-A342BK
OVERALL CHARACTERISTICS
Output power:
85 watts per channel into 4 ohms at 1 kHz (DIN).
65 watts per channel into 8 ohms at 1 kHz (DIN).
55 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.
55 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003% total harmonic distortion. (measured by JVC Audio Analyzer System)

Total harmonic distortion	: 0.007% (20 Hz — 20 kHz, 8 ohms) at 55 watts
Intermodulation distortion	: 0.007% (60 Hz : 7 kHz = 4 : 1, 8 ohms) at 55 watts
Power band width	: 5 Hz — 50 kHz (IHF, 0.05%, 8 ohms both channels driven)
Frequency response	: 5 Hz — 100 kHz +0, −3 dB (8 ohms)
Damping factor	: 100 (1 kHz, 8 ohms)
Input terminals	
Input sensitivity/impedance (1 kHz)	
PHONO	: 2.5 mV/47 kohms
CD/AUX/TUNER/TAPE 1, 2	: 200 mV/27 kohms
Signal-to-noise ratio	
PHONO	: 73 dB ('66 IHF)
CD/AUX/TUNER/TAPE 1, 2	: 110 dB ('66 IHF)
PHONO	: 69 dB (DIN)
CD/AUX/TUNER/TAPE 1, 2	: 74 dB (DIN)
Tone controls	: TREBLE: ±8 ±1 dB (at 10 kHz) BASS: ±8 ±1 dB (at 100 Hz)
Loudness controls (Volume control at −30 dB position)	: +6 dB (at 100 Hz), +4 dB (at 10 kHz)

EQUALIZER

PHONO overload capacity (PHONO to TAPE 2 REC)	: 100 mV (0.02% THD)
PHONO RIAA deviation	: ±0.3 dB (20 Hz — 20 kHz)
Recording output	
Output level/impedance	
TAPE 1, 2, REC	: 200 mV/800 ohms

GENERAL

Dimensions	: 435 (W) x 127 (H) x 306 (D) mm (17-3/16" x 5" x 12-1/16")
Weight	: 7.2 kg (15.9 lbs.)

Design and specifications subject to change without notice.

AX-A441TN/AX-A442BK
OVERALL CHARACTERISTICS
Output power:
110 watts per channel into 4 ohms at 1 kHz (DIN).
75 watts per channel into 8 ohms at 1 kHz (DIN).
65 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.
65 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003% total harmonic distortion. (measured by JVC Audio Analyzer System)

Total harmonic distortion	: 0.007% (20 Hz — 20 kHz, 8 ohms) at 65 watts
Intermodulation distortion	: 0.007% (60 Hz : 7 kHz = 4 : 1, 8 ohms) at 65 watts
Power band width	: 5 Hz — 50 kHz (IHF, 0.05%, 8 ohms both channels driven)
Frequency response	: 5 Hz — 100 kHz +0, −3 dB (8 ohms)
Damping factor	: 100 (1 kHz, 8 ohms)
Input terminals	
Input sensitivity/impedance (1 kHz)	
PHONO (MM)	: 2.5 mV/47 kohms
PHONO (MC)	: 200 µV/100 ohms
CD/AUX/TUNER/TAPE 1, 2	: 200 mV/27 kohms
Signal-to-noise ratio	
PHONO (MM)	: 85 dB ('66 IHF)
PHONO (MC)	: 67 dB ('66 IHF)
CD/AUX/TUNER/TAPE 1, 2	: 110 dB ('66 IHF)
PHONO (MM)	: 69 dB (DIN)
CD/AUX/TUNER/TAPE 1, 2	: 74 dB (DIN)
Tone controls	: TREBLE: ±8 ±1 dB (at 10 kHz) BASS: ±8 ±1 dB (at 100 Hz)
Loudness controls (Volume control at −30 dB position)	: +6 dB (at 100 Hz) +4 dB (at 10 kHz)

EQUALIZER

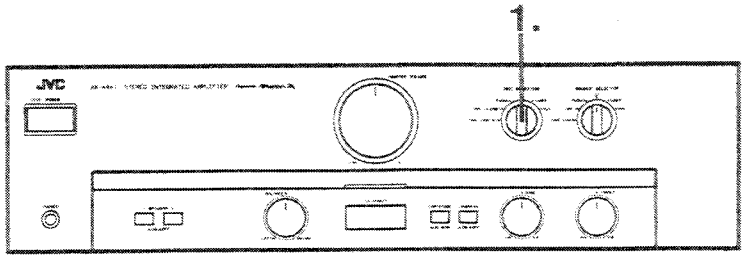
PHONO overload capacity (PHONO to TAPE 2 REC)	
PHONO (MM)	: 100 mV (0.02% THD)
PHONO (MC)	: 8 mV (0.04% THD)
PHONO RIAA deviation	
PHONO (MM)	: ±0.3 dB (20 Hz — 20 kHz)
PHONO (MC)	: ±0.5 dB (20 Hz — 20 kHz)
Recording output	
Output level/impedance	
TAPE 1, 2, REC	: 200 mV/800 ohms

GENERAL

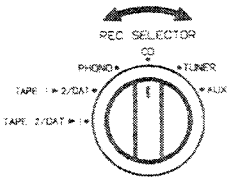
Dimensions	: 435 (W) x 127 (H) x 306 (D) mm (17-3/16" x 5" x 12-1/16")
Weight	: 7.5 kg (16.6 lbs.)

Design and specifications subject to change without notice.

Recording Tapes



1. Set the REC SELECTOR as desired.



2. Play the source according to its instruction manual.
3. Operate the tape deck for recording.

Notes:

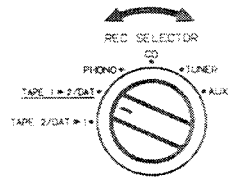
- **To listen to another source while recording, select desired source by the SOURCE SELECTOR.**
- **If your tape deck is 3-head type, you can monitor the sound being recorded. In this case, adjust the SOURCE SELECTOR position to TAPE 1 or TAPE 2/DAT onnected to tape deck.**

Tape Dubbing

Dubbing between TAPE 1 and TAPE 2 is carried out as follows:

— To record from TAPE 1 to TAPE 2 —

1. Set the REC SELECTOR to TAPE 1 ▶ 2/DAT.



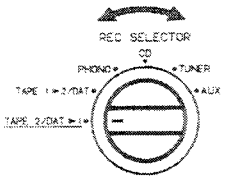
2. Play back the deck TAPE 1 and operate the deck TAPE 2 for recording.

Note:

- **To monitor the recorded sound, connect 3 head-deck to TAPE 2/DAT terminal and set the source selector to TAPE 2.**

— To record from TAPE 2 to TAPE 1 —

1. Set the REC SELECTOR to TAPE 2/DAT ▶ 1.



2. Play back the deck TAPE 2 and operate the deck TAPE 1 for recording.

Note:

- **To monitor the recorded sound, connect 3 head-desk to TAPE 1 terminal and set the source selector to TAPE 1.**

Disassembly Procedures

(1) Removing the Top Cover

1. Remove the 4 screws fastening both sides of the Top Cover, and the 2 screws fastening the rear sides.
2. Remove the Top Cover.

(2) Removing the Bottom Cover

1. Remove the 18 screws Ⓐ. (Fig 2)
2. Remove the Bottom Cover.

(3) Removing the Front Panel

1. Remove the top cover.
2. Remove the 3 screws Ⓑ and 3 plastic rivets Ⓒ. (Fig 1,2)
3. Pull out the main volume knob.

(4) Removing the Power Transistor

1. Remove the top cover and the bottom plate.
2. Unsolder the defective power transistor.
3. Remove the screw holding the power transistor using a pair of pliers , a wrench or a bent screwdriver

(5) Removing / Installing the flexible wire of remote switch

1. Set the SOURCE SELECTOR knob (REC SELECTOR knob) to AUX position when removing .
2. Insert the tip of the driver into the openings in the switch.(Fig 3)
3. Move the driver down so that the claws of the switch open.
4. After opening both claws , lift the mold portion.
   Note : Be most careful when handling the flexible wire. Do not bend it sharply or twist it .
5. Set the SOURCE SELECTOR knob (REC SELECTOR knob) to AUX position of switch to Ⓓ (or Ⓔ) direction , then install the mold portion .

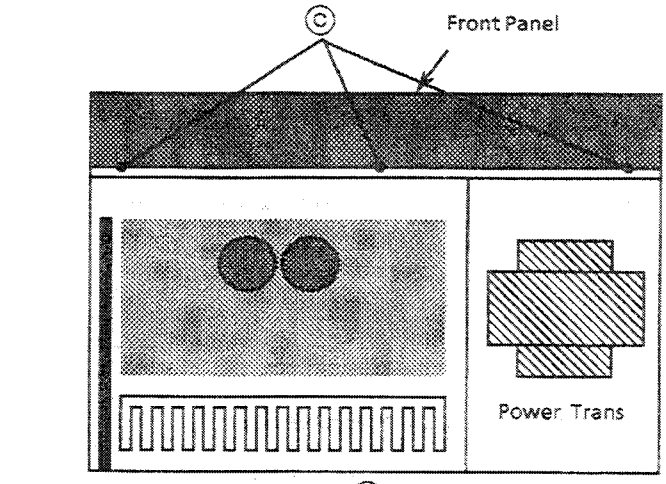


Fig 1. Top View

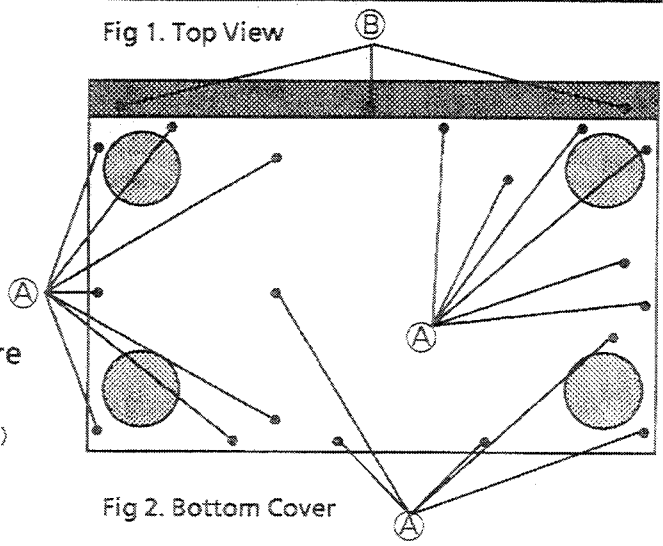


Fig 2. Bottom Cover

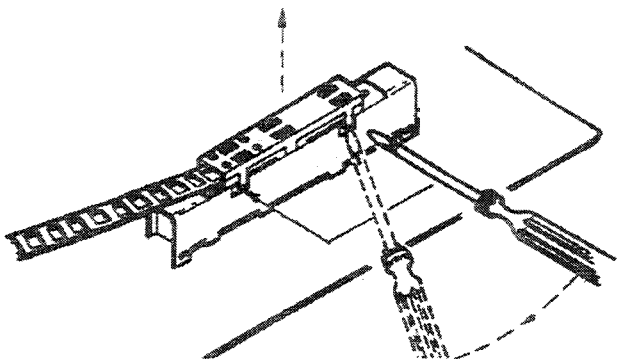


Fig 3. Removing the flexible wire of remote switch.

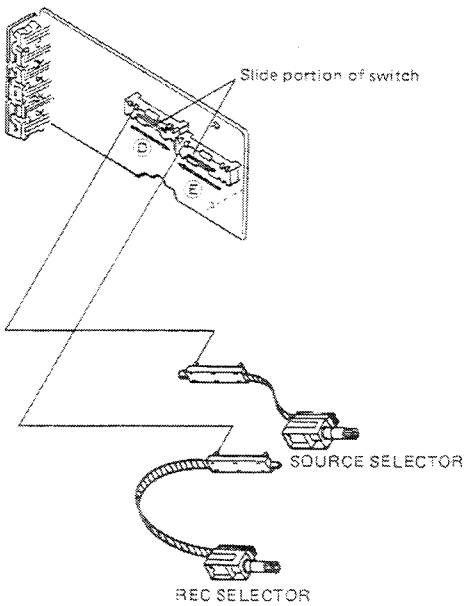


Fig 4 . Installing the flexible wire of remote switch.

POWER SPECIFICATIONS

Area	Line Voltage & Frequency	Power Conumption	
		AX-A341TN/AX-A342BK	AX-R441TN/AX-A442BK
U.K. Australia	AC 240 V ∿, 50 Hz	250 watts	610 watts
Continental Europe	AC 230 V ∿, 50 Hz	240 watts	250 watts
Other areas	AC 110 / 127 / 220 / 240 V ∿ selectable, 50/60 Hz	230 watts	270 watts

SPANNUNGSVERSORGUNG UND LEISTUNGSAUFNAHME

Länder	Netzspannung und Frequenz	Leistungsaufnahme	
		AX-A341TN/AX-A342BK	AX-A441TN/AX-A442BK
Großbritannien Australie	240 V ∿, 50 Hz	250 Watt	610 Watt
Kontinental-Europa	230 V ∿, 50 Hz	240 Watt	250 Watt
Andere Länder	umschaltbar 110 / 127 / 220 / 240 V ∿ 50/60 Hz	230 Watt	270 Watt

CARACTERISTIQUES TECHNIQUES D'ALIMENTATION

Pays	Tension d'alimentation et fréquence	Consommation	
		AX-A341TN/AX-A342BK	AX-A441TN/AX-A442BK
Royaume-Uni Australie	CA 240 V ∿, 50 Hz	250 watts	610 watts
Europe Continentale	CA 230 V ∿, 50 Hz	240 watts	250 watts
Autres Pays	CA 110 / 127 / 220 / 240 V ∿, commutable, 50/60 Hz	230 watts	270 watts

SPANNINGSVEREISTEN

Gebieden	Netspanning en frekwentie	Stroomverbruik	
		AX-A341TN/AX-A342BK	AX-441TN/AX-A442BK
Engeland Australië	Net 240 V ∿ 50 Hz	250 Watt	610 Watt
Europese vasteland	Net 230 V ∿ 50 Hz	240 Watt	250 Watt
Andere gebieden	Net 110 / 127 / 220 / 240 V ∿ instelbaar, 50/60 Hz	230 Watt	270 Watt

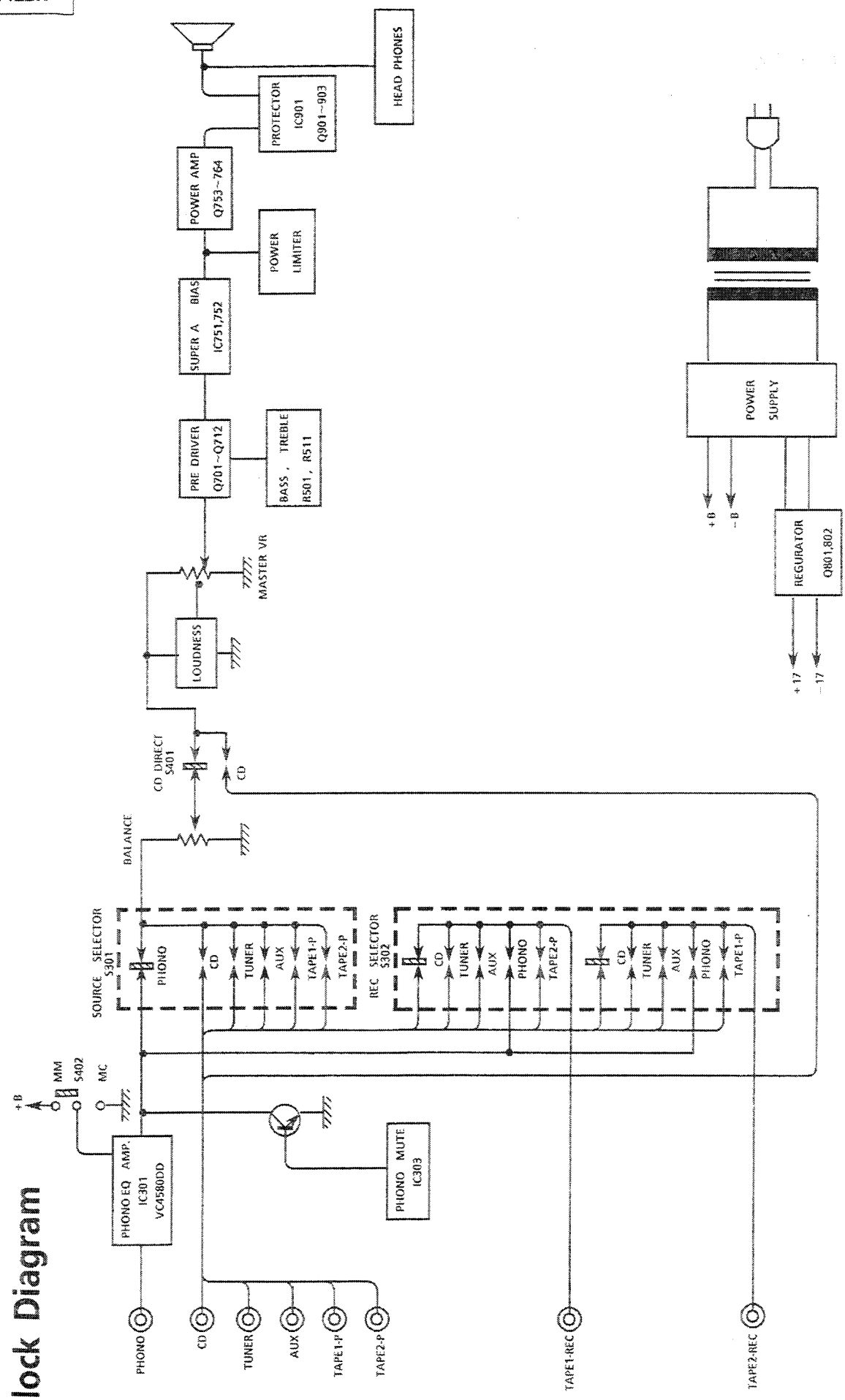
ESPECIFICACIONES DE ALIMENTACION

Paises	Voltaje y frecuencia	Consumo	
		AX-A341TN/AX-A342BK	AX-A441TN/AX-A442BK
Reino Unido Australia	AC 240 V ∿, 50 Hz	250 vatios	610 vatios
Europa Continental	AC 230 V ∿, 50 Hz	240 vatios	250 vatios
Otras paises	AC 110 / 127 / 220 / 240 V ∿ seleccionable, 50/60 Hz	230 vatios	270 vatios

STRÖMFÖRSÖRJNING

Områden	Nätspänning & frekvens	Effektförbrukning	
		AX-A341TN/AX-A342BK	AX-A441TN/AX-A442BK
Storbritannien Australien	∿240 V, 50 Hz	250 Watt	610 Watt
Kontinentaleuropa	∿230 V, 50 Hz	240 Watt	250 Watt
Övriga länder	∿110 / 127 / 220 / 240 V (omkopplingsbart), 50/60 Hz	230 Watt	270 Watt

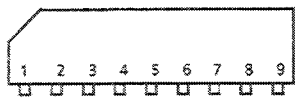
Block Diagram



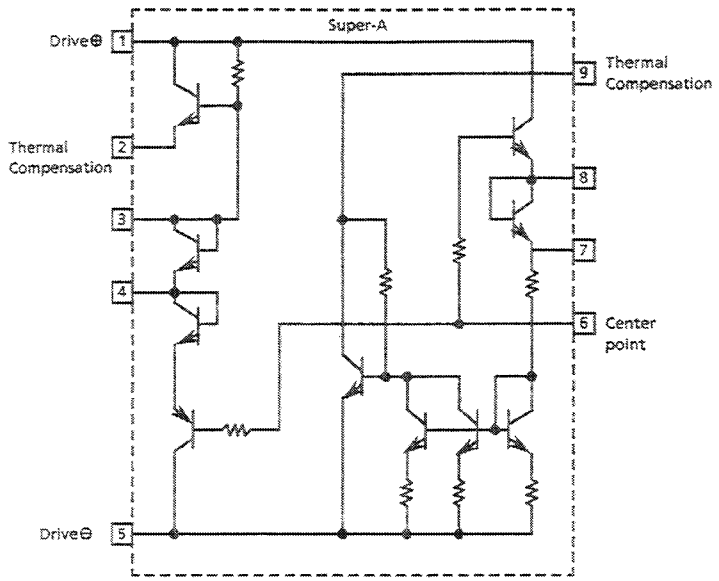
Internal Block Diagrams of ICs

VC5022 (IC751,752) : SUPER- A

(1) Terminal Layout

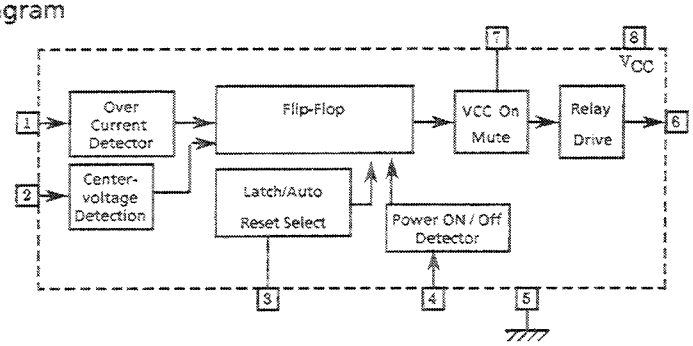


(2) Block Diagram

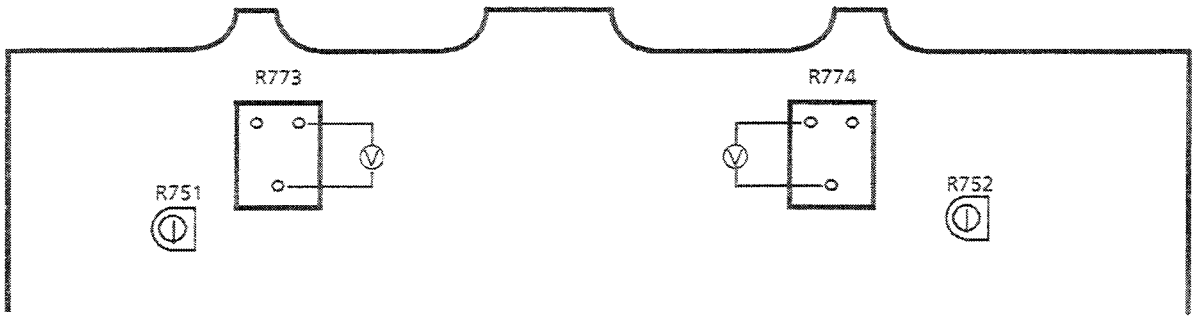


μPC1237HA(IC303,901) : Protector, Relay Driver

(1) Block Diagram



Power Amplifier Adjustment Procedures

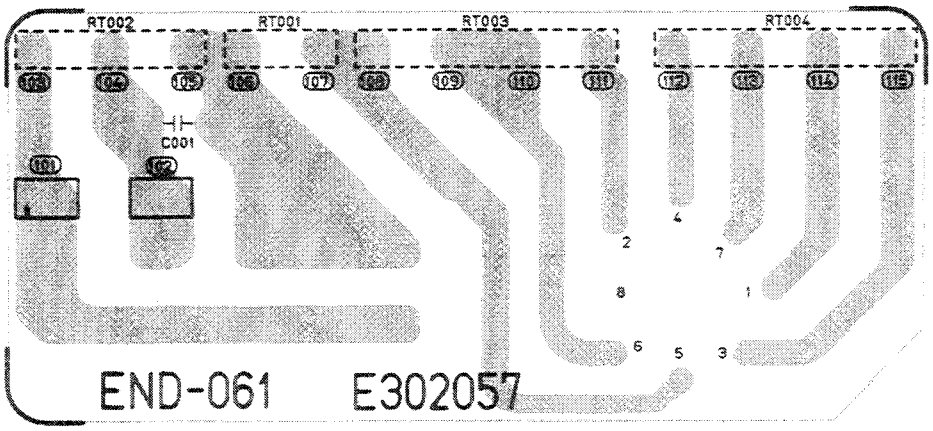


Idling Current

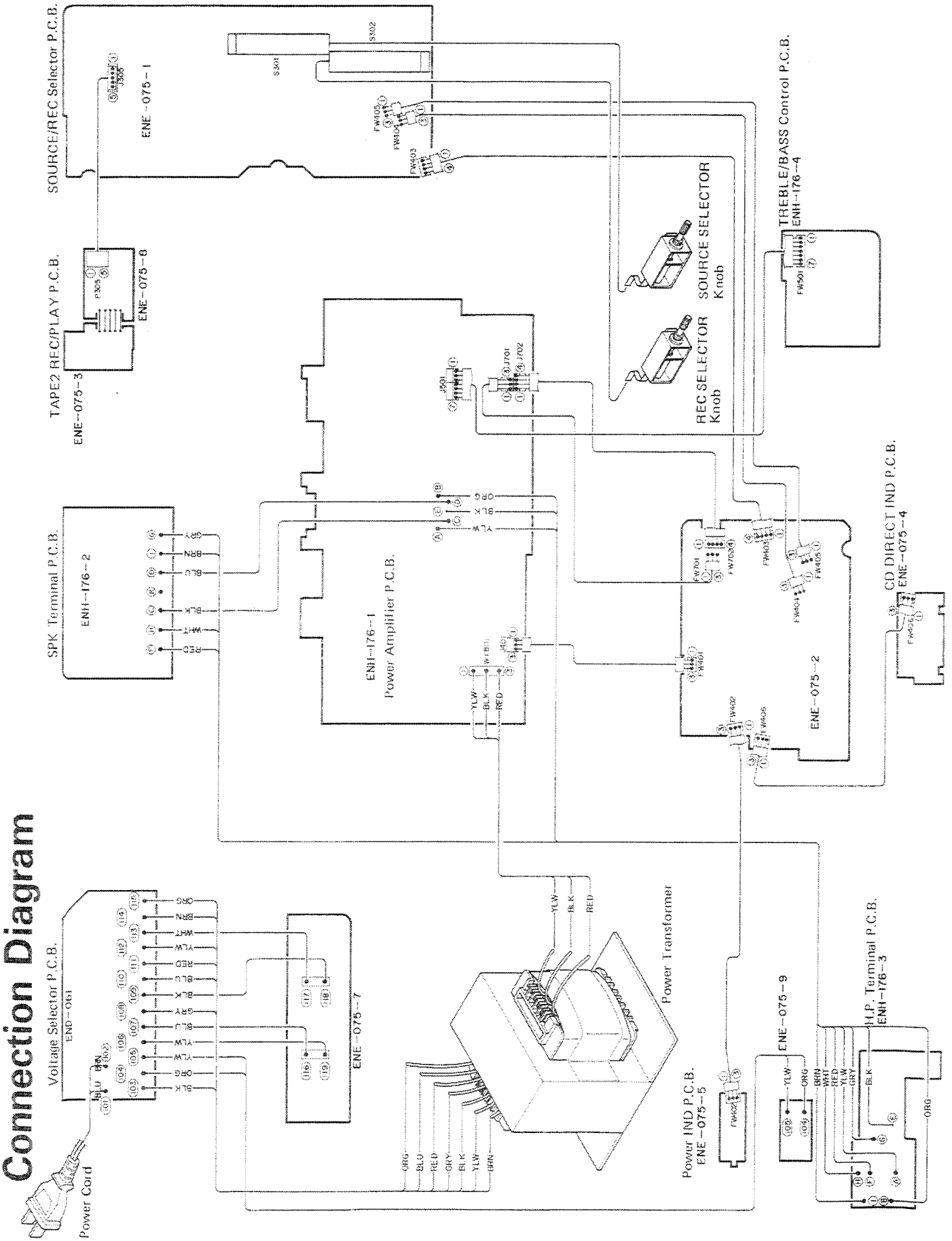
(1) Set the volume control to minimum during this adjustment.
(2) Turn R751 and R752 fully counterclockwise before the power switch on.
(3) Always start from cold,and allow 10 minutes to warm up before adjustment.If the heatsink is already warm from previous use the correct adjustment can not be made.
(5) Connect a DC voltmeter to R773 resistor's leads for left channel, or to R774 for right channel.
(6) Adjust R751 for left channel, or 752 for right channel, so that the DC voltmeter becomes 7mV ~ 15mV

Printed Circuit Boards

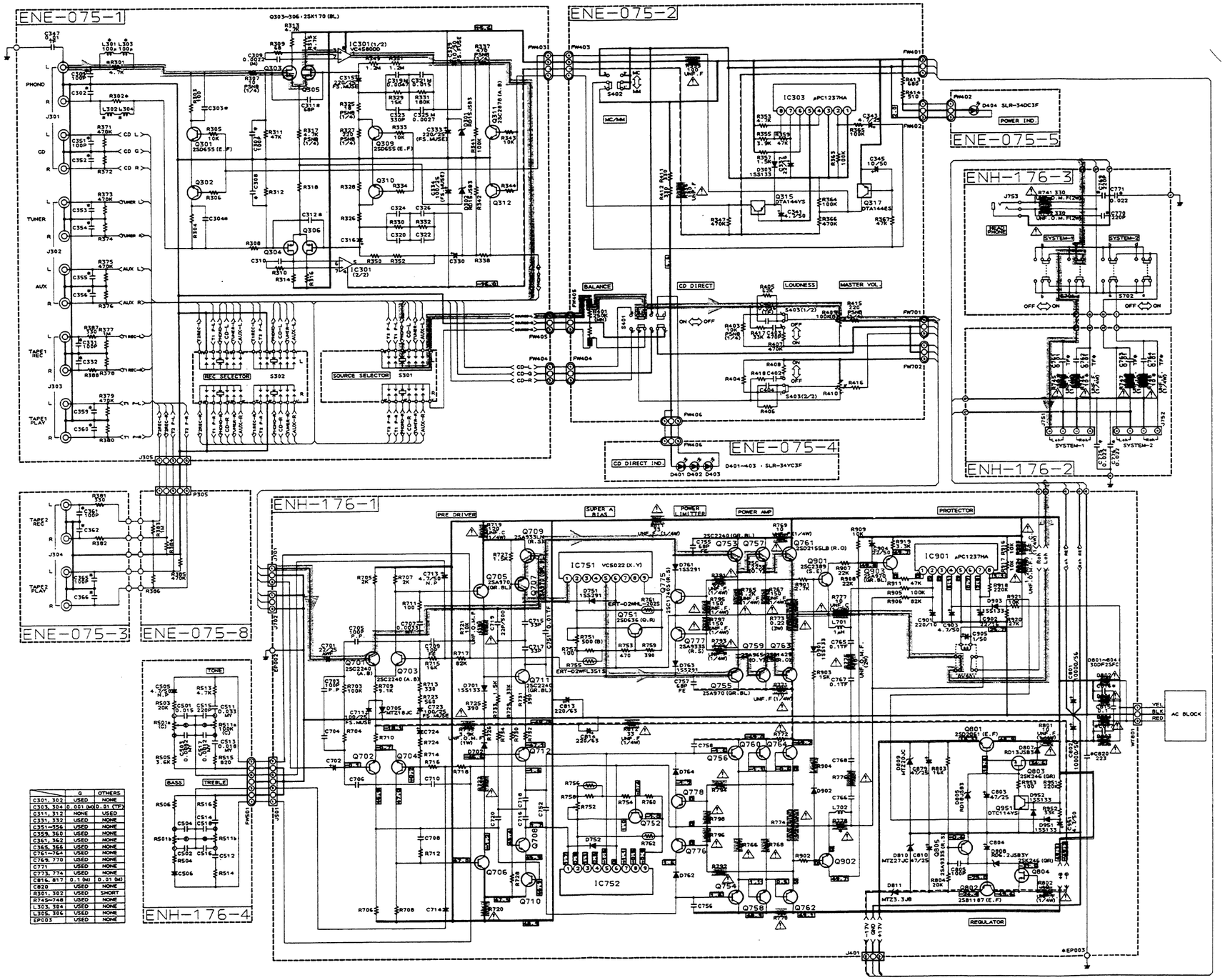
■ Voltage Selector P.C.B (END-061)



Connection Diagram



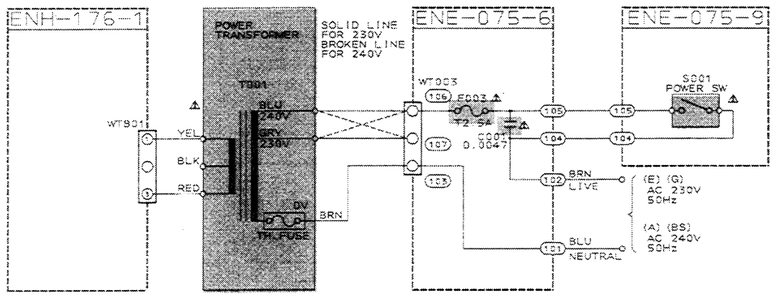
Schematic Diagrams



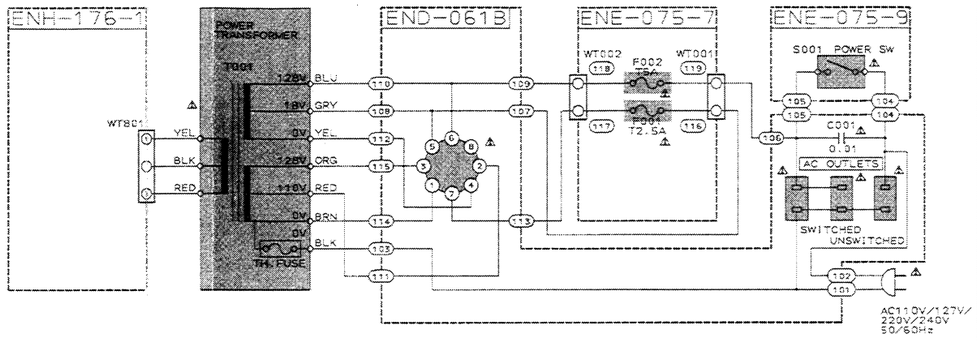
	Q	OTHERS
C301, 302	USED	NONE
C303, 304	0.001 (M)	0.01 (TF)
C311, 312	NONE	USED
C331, 332	USED	NONE
C351~356	USED	NONE
C359, 360	USED	NONE
C361, 362	USED	NONE
C365, 366	USED	NONE
C761~764	USED	NONE
C769, 770	USED	NONE
C771	USED	NONE
C773, 774	USED	NONE
C816, 817	0.1 (M)	0.01 (M)
C820	USED	NONE
R301, 302	USED	SHORT
R745~748	USED	NONE
L303, 304	USED	NONE
L305, 306	USED	NONE
EP003	USED	NONE

AC BLOCK

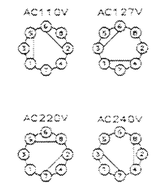
(E.G.A.BS) (E.G) FOR EUROPE, GERMANY (A) FOR AUSTRALIA (BS) FOR U.K. AC230V.50Hz AC240V.50Hz



(U) (U) FOR OTHER COUNTRIES AC110/127/220/240V. 50/60Hz



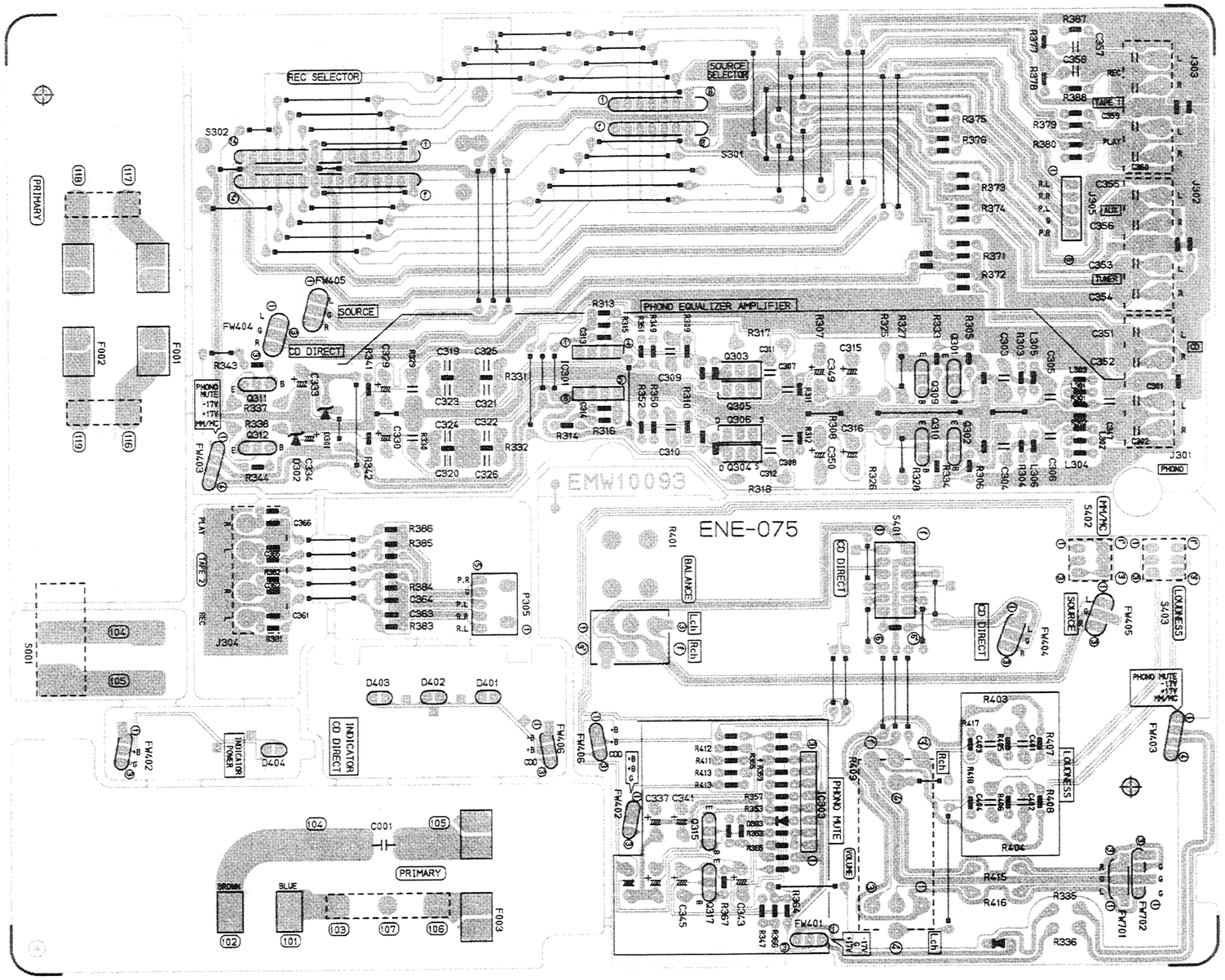
VOLTAGE SELECTOR CONNECTION



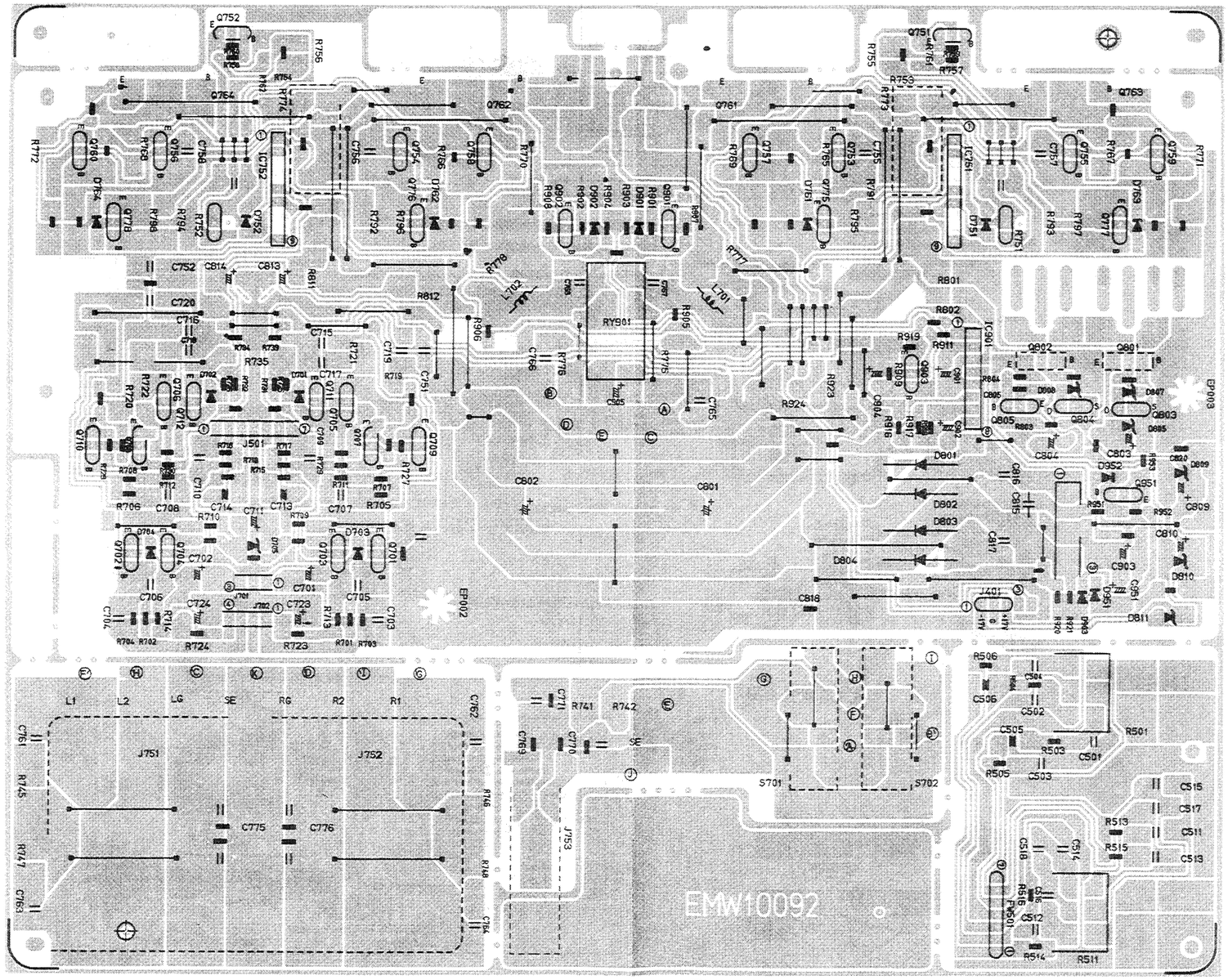
Notes:

1. ——— indicates +B power supply.
2. - - - - indicates −B power supply.
3. ▒▒▒▒ indicates signal path.
4. ▭ shows voltage.
5. When replacing the parts in the darkened area (▒▒▒▒) and those marked with ⚠, be sure to use the designated parts to ensure safety.
   This is the standard circuit diagram.
6. The design and contents are subject to change without notice.

■ Source Selector & Power Primary P.C.B (ENE-075)



■ Power Amp P.C.B (ENH-176)



ENH-176

PARTS LIST

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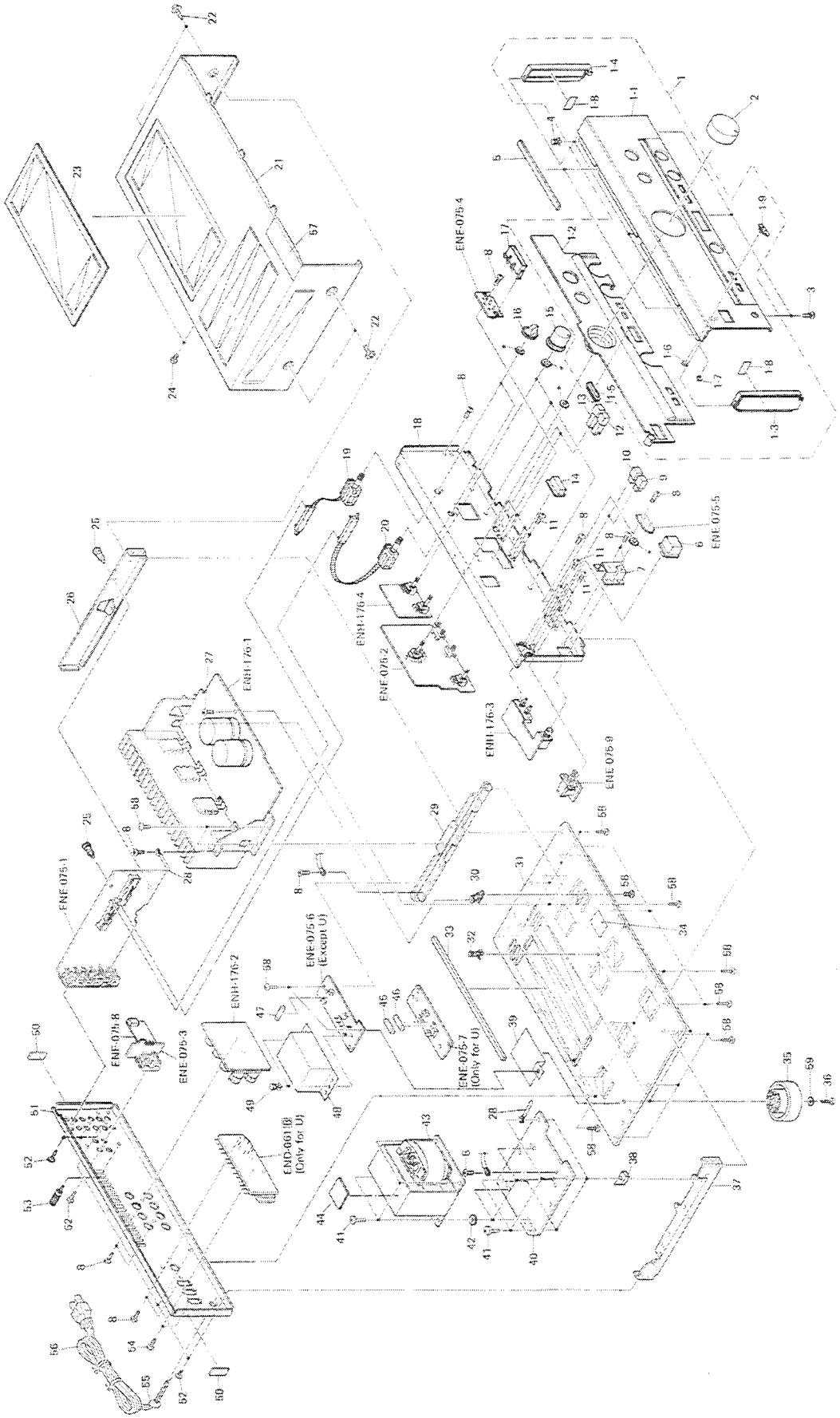
General Exploded View and Parts List



* mark indicates attached part.

■AX-A441TN Parts List

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-AXA441TNE	Front Panel Ass'y	1		
	1-1	E207078-001	Front Panel	1		
	1-2	E102418-001	Front Base	1		
	1-3	E307424-001	Side Fitting	1	Left	
	1-4	E307424-002	Side Fitting	1	Right	
	1-5	E406486-001	Indicator	1	CD Direct	
	1-6	E60912-003	Speed Nut	1		
	1-7	E75934-002	Indicator	1	Stand BY.	
	1-8	EXO020010R15S13	Spacer	2		
	1-9	E72968-001	JVC Mark	1		
	2	E307425-001	Volume Knob	1		
	3	SBSG3006M	Screw	3		
	4	E48729-009	Plastic Rivet	3		
	5	EXO170005N35S02	Felt Spacer	2		
	6	E406481-001	Power Button	1		
	7	E75183-001	Head Phone Bracket	1		
	8	SBSG3008CC	Screw	12		Except G, U
		SBSG3008CC	Screw	14		G, U
	9	E406482-002	Push Button	1	SPK-2	
	10	E406482-001	Push Button	1	SPK-1	
	11	SBST3006CC	Screw	8		
	12	E406483-001	Push Button	1	Cartridge	
	13	E406483-002	Push Button	1	Loudness	
	14	E406484-001	Push Button	1	CD Direct	
	15	E75527-006	Knob	3	Tone	
	16	E406485-001	Knob	2	Source	
	17	E307426-001	LED. Holder	1		
	18	E102419-001	Front Bracket	1		
	19	QSR2B16-E03	Rotary Switch	1	Source Select	
	20	QSR2B19-E04	Rotary Switch	1	Rec Select	
	21	E206801-002	Metal Cover	1		A, G
		E26753-002	Metal Cover	1		E, EF, U, BS
	22	E61660-004	Special Screw	4		
	23	E306233-002	Protect Sheet	1		E, EF, U, BS
	24	SBSG3008M	Screw	2		
	25	E303216-006	Fastener	2		
	26	E305811-002	Side Bracket	1	Right	
	27	E74266-002	Special Screw	1		
	28	E72018-001	Wire Clamp	2		
	29	E305812-002	Center Bracket	1		
	30	E68587-008	Bracket	1		
	31	E26273-003	Bottom Cover	1		
	32	E306816-001	Fastener	1		
	33	EXO255005N60S02	Spacer	1		
	34	E70115-002	Caution Label	1		
	35	E307427-001	Foot Ass'y	4		
	36	SBST3008Z	Screw	4		
	37	E305810-001	Side Bracket	1	Left	
	38	E406309-001	Spacer	4		
	39	E406626-001	Protect Sheet	1		
	40	E305803-005	Trans Bracket	1		
	41	E61661-004	Special Screw	8		
	42	E73968-002	Spacer	4		
⚠	43	ETP1150-39EB	Power Transformer	1	T001	A, E, EF, G
⚠		ETP1150-39EBBS	Power Transformer	1	T001	BS
⚠		ETP1150-39FA	Power Transformer	1	T001	U
	44	EXO060050N40S02	Spacer	1	for Transformer	
⚠	45	QMF51A2-2R5S	Fuse	1	F001	U
⚠	46	QMF51A2-5R0S	Fuse	1	F002	U
⚠	47	QMF51A2-2R5S	Fuse	1	F003	A, E, EF, G
⚠		QMF51E2-2R5SBS	Fuse	1	F003	BS
	48	E307503-001	Protect Cover	1		A, E, EF, G, BS
	49	E48729-008	Plastic Rivet	2		A, E, EF, G, BS
	50	EXO020010R10S10	Spacer	2		
	51	E26334-013	Rear Panel	1		U
		E26334-014	Rear Panel	1		Except U
	–	E303260-229	Rating Label	1		E, EF, G
	52	E73273-003	Special Screw	9		Except U
		E73273-003	Special Screw	2		U
	53	E70078-003	GND. Terminal	1		
	54	SDSG3008CC	Screw	2		U
⚠	55	QHS3876-162	Cord Stopper	1		Except BS
⚠		QHS3876-162BS	Cord Stopper	1		BS
⚠	56	QMP2560-244	Power Cord	1		A
⚠		QMP3900-200	Power Cord	1		E, EF, G
⚠		QMP7520-200	Power Cord	1		U
⚠		QMP9017-008BS	Power Cord	1		BS
	57	E67000-005	Caution Label	1		
	58	GBSG3008CC	Screw	22		
	59	WNS3000CC	Washer	4		
	–	E61029-005	Number Label	1		U, A, BS
	–	E70028-001	Approval Label	1		E
	–	E74792-086	FTZ Label	1		G

⚠: Safety Parts

The Marks Designated Areas

A·····Australia
G·····Germany
E, EF·····Continental Europe
BS·····the U.K.
U·····Other Countries
No mark indicates all areas.

■AX-A442BK Parts List

Please refer to AX-A441TN parts list except following parts.

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-AXA442BKE	Front Panel Ass'y	1		
	1-1	E207078-002	Front Panel	1		
	1-2	E102418-002	Front Base	1		
	1-3	E307424-003	Side Fitting	1	Left	
	1-4	E307424-004	Side Fitting	1	Right	
	2	E307425-002	Volume Knob	1		
	6	E406481-002	Power Button	1		
	9	E406482-004	Push Button	1	SPK-2	
	10	E406482-003	Push Button	1	SPK-1	
	12	E406483-003	Push Button	1	Cartridge	
	13	E406483-004	Push Button	1	Loudness	
	14	E406484-002	Push Button	1	CD Direct	
	15	E75527-004	Knob	3	Tone	
	16	E406485-002	Knob	2	Source	
	21	E206801-001	Metal Cover	1		A, G
		E26753-001	Metal Cover	1		E, EF, U, BS
	35	E307427-002	Foot Ass'y	4		
	51	E26334-015	Rear Panel	1		U
		E26334-016	Rear Panel	1		Except U
	–	E303260-230	Rating Label	1		E, EF, G
	–	E74792-087	FTZ Label	1		G

⚠: Safety Parts

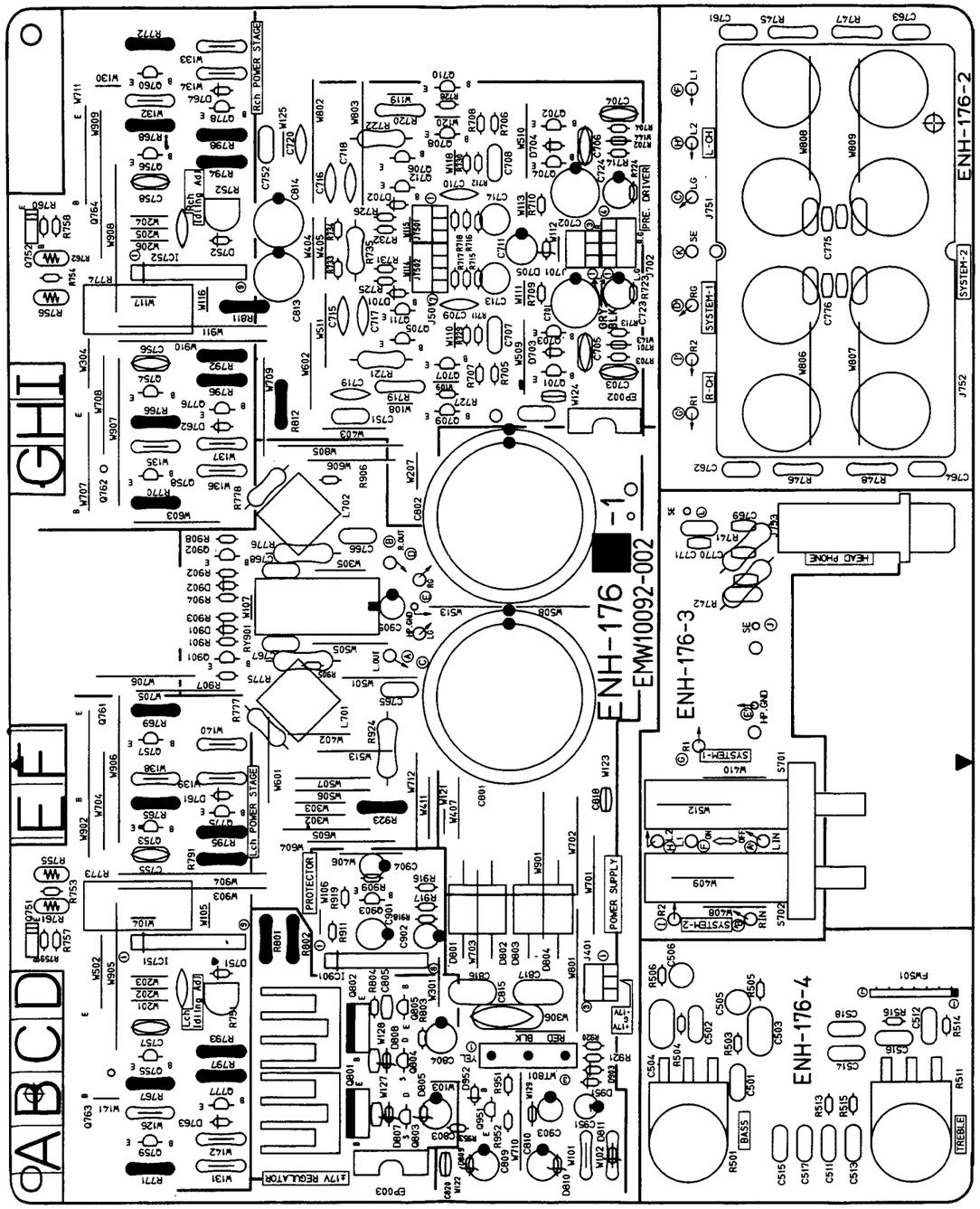
The Marks Designated Areas

A·····Australia
G·····Germany
E, EF·····Continental Europe
BS·····the U.K.
U·····Other Countries
No mark indicates all areas.

Printed Circuit Board Ass'y and Parts List

■ENH-176 ☐ Power Amplifier PC Board Ass'y

Note : ENH-176 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENH-176 E	Other Countries
ENH-176 F	Australia , Continental Europe
ENH-176 G	Germany
ENH-176 H	the U.K.

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q701	2SC2240(A,B)	SILICON	TOSHIBA	
	Q702	2SC2240(A,B)	SILICON	TOSHIBA	
	Q703	2SC2240(A,B)	SILICON	TOSHIBA	
	Q704	2SC2240(A,B)	SILICON	TOSHIBA	
	Q705	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q706	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q707	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q708	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q709	2SA933LN(R,S)	SILICON	ROHM	
	Q710	2SA933LN(R,S)	SILICON	ROHM	
	Q711	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q712	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q751	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q752	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q753	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q754	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q755	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q756	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q757	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q758	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q759	2SA965(O,Y)	SILICON	TOSHIBA	
	Q760	2SA965(O,Y)	SILICON	TOSHIBA	
	Q761	2SD2155LB(R,O)	SILICON	TOSHIBA	
	Q762	2SD2155LB(R,O)	SILICON	TOSHIBA	
	Q763	2SB1429LB(R,O)	SILICON	TOSHIBA	
	Q764	2SB1429LB(R,O)	SILICON	TOSHIBA	
	Q775	2SC1740S(R,S)	SILICON	ROHM	
	Q776	2SC1740S(R,S)	SILICON	ROHM	
	Q777	2SA933S(R,S)	SILICON	ROHM	
	Q778	2SA933S(R,S)	SILICON	ROHM	
	Q801	2SD2061(E,F)	SILICON	ROHM	
	Q802	2SB1187(E,F)	SILICON	ROHM	
	Q803	2SK246(GR)	F.E.T	TOSHIBA	
	Q804	2SK246(GR)	F.E.T	TOSHIBA	
	Q805	2SA933S(R,S)	SILICON	ROHM	
	Q901	2SC2389(S,E)	SILICON	ROHM	
	Q902	2SC2389(S,E)	SILICON	ROHM	
	Q903	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q951	DTC114YS	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC751	VC5022(X,Y)	I.C.	ROHM	
	IC752	VC5022(X,Y)	I.C.	ROHM	
	IC901	UPC1237HA	I.C.	NEC	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D701	1SS133	SILICON	ROHM	
	D702	1SS133	SILICON	ROHM	
	D705	MTZ18JC	ZENER	ROHM	
	D751	1SS291	SILICON	ROHM	
	D752	1SS291	SILICON	ROHM	
	D761	1SS291	SILICON	ROHM	
	D762	1SS291	SILICON	ROHM	
	D763	1SS291	SILICON	ROHM	
	D764	1SS291	SILICON	ROHM	
	D801	30DF2SFC	SILICON	NIHONINTER	
	D802	30DF2SFC	SILICON	NIHONINTER	
	D803	30DF2SFC	SILICON	NIHONINTER	
	D804	30DF2SFC	SILICON	NIHONINTER	
	D805	RD18JSB3	ZENER	NEC	
	D807	RD13JSB3	ZENER	NEC	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D808	RD6.2JSB3	ZENER	NEC	
	D809	MTZ20JC	ZENER	ROHM	
	D810	MTZ27JC	ZENER	ROHM	
	D811	MTZ3.3JB	ZENER	ROHM	
	D901	1SS133	SILICON	ROHM	
	D902	1SS133	SILICON	ROHM	
	D903	1SS133	SILICON	ROHM	
	D951	1SS133	SILICON	ROHM	
	D952	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C501	QFN81HK-153	0.015MF	50V	MYLAR	
	C502	QFN81HK-153	0.015MF	50V	MYLAR	
	C503	QFN81HK-823	0.082MF	50V	MYLAR	
	C504	QFN81HK-823	0.082MF	50V	MYLAR	
	C505	QEN51HM-475	4.7MF	50V	NON POLE	
	C506	QEN51HM-475	4.7MF	50V	NON POLE	
	C511	QFN81HK-332	3300PF	50V	MYLAR	
	C512	QFN81HK-332	3300PF	50V	MYLAR	
	C513	QFN81HK-183	0.018MF	50V	MYLAR	
	C514	QFN81HK-183	0.018MF	50V	MYLAR	
	C515	QCS21HJ-221	220PF	50V	CERAMIC	
	C516	QCS21HJ-221	220PF	50V	CERAMIC	
	C517	QFN81HK-122	1200PF	50V	MYLAR	
	C518	QFN81HK-122	1200PF	50V	MYLAR	
	C701	EEZ5006-226	22MF		ELECTRO	
	C702	EEZ5006-226	22MF		ELECTRO	
	C703	QFP81HJ-101	100PF	50V	POLY	
	C704	QFP81HJ-101	100PF	50V	POLY	
	C705	QFP81HJ-101	100PF	50V	POLY	
	C706	QFP81HJ-101	100PF	50V	POLY	
	C707	QFN81HK-332	3300PF	50V	MYLAR	
	C708	QFN81HK-332	3300PF	50V	MYLAR	
	C709	EFF001J-100			FILM MICA	CA
	C710	EFF001J-100			FILM MICA	CA
	C711	EEZ2505-107	100MF		ELECTRO	
	C713	QEN51HM-475	4.7MF	50V	NON POLE	
	C714	QEN51HM-475	4.7MF	50V	NON POLE	
	C715	QCS21HJ-330	33PF	50V	CERAMIC	
	C716	QCS21HJ-330	33PF	50V	CERAMIC	
	C717	QCS21HJ-330	33PF	50V	CERAMIC	
	C718	QCS21HJ-330	33PF	50V	CERAMIC	
	C719	QCS21HJ-220	22PF	50V	CERAMIC	
	C720	QCS21HJ-220	22PF	50V	CERAMIC	
	C723	EEZ2505-107	100MF		ELECTRO	
	C724	EEZ2505-107	100MF		ELECTRO	
	C751	QFV81HJ-103	0.01MF	50V	T.FILM	
	C752	QFV81HJ-103	0.01MF	50V	T.FILM	
	C755	EFF001J-680			FILM MICA	CA
	C756	EFF001J-680			FILM MICA	CA
	C757	EFF001J-680			FILM MICA	CA
	C758	EFF001J-680			FILM MICA	CA
	C761	QFV81HJ-103	0.01MF	50V	T.FILM	G
	C762	QFV81HJ-103	0.01MF	50V	T.FILM	G
	C763	QFV81HJ-103	0.01MF	50V	T.FILM	G
	C764	QFV81HJ-103	0.01MF	50V	T.FILM	G
	C765	QFV81HJ-104	0.1MF	50V	T.FILM	
	C766	QFV81HJ-104	0.1MF	50V	T.FILM	
	C767	QFV81HJ-104	0.1MF	50V	T.FILM	
	C768	QFV81HJ-104	0.1MF	50V	T.FILM	
	C769	QCBB1HK-221	220PF	50V	CERAMIC	G
	C770	QCBB1HK-221	220PF	50V	CERAMIC	G
	C771	QCHB1EZ-223	0.022MF	25V	CERAMIC	G
	C775	QCHB1EZ-223	0.022MF	25V	CERAMIC	G
	C776	QCHB1EZ-223	0.022MF	25V	CERAMIC	G
	C801	EEW5606-109	10000MF		ELECTRO	
	C802	EEW5606-109	10000MF		ELECTRO	
	C803	QETB1EM-476	47MF	25V	ELECTRO	
	C804	QETB1EM-476	47MF	25V	ELECTRO	
	C805	QCBB1HK-101	100PF	50V	CERAMIC	
	C809	QETB1EM-476	47MF	25V	ELECTRO	
	C810	QETB1EM-476	47MF	25V	ELECTRO	
	C813	EETB1JM-227E	220MF	63V	ELECTRO	
	C814	EETB1JM-227E	220MF	63V	ELECTRO	
	C815	QFH42EK-104	0.1MF	250V	M.MYLAR	
	C816	QFN82AK-103	0.01MF	100V	MYLAR	E
	C816	QFN82AK-103	0.01MF	100V	MYLAR	F
	C816	QFN32AK-104	0.1MF	100V	MYLAR	G
	C816	QFN82AK-103	0.01MF	100V	MYLAR	H
	C817	QFN82AK-103	0.01MF	100V	MYLAR	E
	C817	QFN82AK-103	0.01MF	100V	MYLAR	F
	C817	QFN32AK-104	0.1MF	100V	MYLAR	G
	C817	QFN82AK-103	0.01MF	100V	MYLAR	H
	C820	QCHB1EZ-223	0.022MF	25V	CERAMIC	G
	C901	QETB1AM-227	220MF	10V	ELECTRO	
	C902	QETB1CM-226	22MF	16V	ELECTRO	
	C903	QETB1HM-475	4.7MF	50V	ELECTRO	
	C904	QETB1HM-226	22MF	50V	ELECTRO	
	C905	QETB1HM-105	1MF	50V	ELECTRO	
	C951	QETB1HM-475	4.7MF	50V	ELECTRO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R501	QVD9870-E15B	100K		VARIABLE	
	R503	QRD167J-203	20K	1/6W	CARBON	
	R504	QRD167J-203	20K	1/6W	CARBON	
	R505	QRD167J-362	3.6K	1/6W	CARBON	
	R506	QRD167J-362	3.6K	1/6W	CARBON	
	R511	QVD9870-E15B	100K		VARIABLE	
	R513	QRD167J-472	4.7K	1/6W	CARBON	
	R514	QRD167J-472	4.7K	1/6W	CARBON	
	R515	QRD167J-821	820	1/6W	CARBON	
	R516	QRD167J-821	820	1/6W	CARBON	
	R703	QRD167J-104	100K	1/6W	CARBON	
	R704	QRD167J-104	100K	1/6W	CARBON	
	R705	QRD167J-202	2K	1/6W	CARBON	
	R706	QRD167J-202	2K	1/6W	CARBON	
	R707	QRD167J-202	2K	1/6W	CARBON	
	R708	QRD167J-202	2K	1/6W	CARBON	
	R709	QRD167J-912	9.1K	1/6W	CARBON	
	R710	QRD167J-912	9.1K	1/6W	CARBON	
	R711	QRD167J-101	100	1/6W	CARBON	
	R712	QRD167J-101	100	1/6W	CARBON	
⚠	R713	QRV144F-3300		1/4W	M.FILM	
⚠	R714	QRV144F-3300		1/4W	M.FILM	
⚠	R715	QRV144F-1602	16K	1/4W	M.FILM	
⚠	R716	QRV144F-1602	16K	1/4W	M.FILM	
⚠	R717	QRV144F-8202	82K	1/4W	M.FILM	
⚠	R718	QRV144F-8202	82K	1/4W	M.FILM	
⚠	R719	QRD14CJ-121S	120	1/4W	UNF.CARBON	
⚠	R720	QRD14CJ-121S	120	1/4W	UNF.CARBON	
⚠	R721	QRG012J-103AM	10K	1W	O.M.FILM	
⚠	R722	QRG012J-103AM	10K	1W	O.M.FILM	
⚠	R723	QRV144F-5600		1/4W	M.FILM	
⚠	R724	QRV144F-5600		1/4W	M.FILM	
	R725	QRD167J-391	390	1/6W	CARBON	
	R726	QRD167J-391	390	1/6W	CARBON	
	R727	QRD167J-152	1.5K	1/6W	CARBON	
	R728	QRD167J-152	1.5K	1/6W	CARBON	
	R729	QRD167J-333	33K	1/6W	CARBON	
	R730	QRD167J-333	33K	1/6W	CARBON	
	R731	QRD167J-391	390	1/6W	CARBON	
	R732	QRD167J-391	390	1/6W	CARBON	
	R733	QRD167J-152	1.5K	1/6W	CARBON	
	R734	QRD167J-152	1.5K	1/6W	CARBON	
⚠	R735	QRG012J-392A	3.9K	1W	O.M.FILM	
⚠	R741	QRG022J-331A	330	2W	O.M.FILM	
⚠	R742	QRG022J-331A	330	2W	O.M.FILM	
⚠	R745	QRZ0077-100	10	1/4W	FUSIBLE	G
⚠	R746	QRZ0077-100	10	1/4W	FUSIBLE	G
⚠	R747	QRZ0077-100	10	1/4W	FUSIBLE	G
⚠	R748	QRZ0077-100	10	1/4W	FUSIBLE	G
	R751	QVPE602-501	500	0.15W	VARIABLE	
	R752	QVPE601-501	500	0.15W	VARIABLE	
	R753	QRD167J-101	100	1/6W	CARBON	
	R754	QRD167J-101	100	1/6W	CARBON	
	R755	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R756	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R757	QRD167J-471	470	1/6W	CARBON	
	R758	QRD167J-471	470	1/6W	CARBON	
	R759	QRD167J-391	390	1/6W	CARBON	
	R760	QRD167J-391	390	1/6W	CARBON	
	R761	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
	R762	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
⚠	R765	QRZ0077-122	1.2K	1/4W	FUSIBLE	
⚠	R766	QRZ0077-122	1.2K	1/4W	FUSIBLE	
⚠	R767	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R768	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R769	QRZ0077-100	10	1/4W	FUSIBLE	
⚠	R770	QRZ0077-100	10	1/4W	FUSIBLE	
⚠	R771	QRZ0077-100	10	1/4W	FUSIBLE	
⚠	R772	QRZ0077-100	10	1/4W	FUSIBLE	
⚠	R773	ERF032K-R22	0.22	3W	CEMENT	
⚠	R774	ERF032K-R22	0.22	3W	CEMENT	
⚠	R775	QRG022J-100A	10	2W	O.M.FILM	
⚠	R776	QRG022J-100A	10	2W	O.M.FILM	
⚠	R777	QRD125J-100	10	1/2W	UNF.CARBON	
⚠	R778	QRD125J-100	10	1/2W	UNF.CARBON	
⚠	R791	QRZ0077-621	620	1/4W	FUSIBLE	
⚠	R792	QRZ0077-621	620	1/4W	FUSIBLE	
⚠	R793	QRZ0077-621	620	1/4W	FUSIBLE	
⚠	R794	QRZ0077-621	620	1/4W	FUSIBLE	
⚠	R795	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R796	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R797	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R798	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R801	QRZ0077-100	10	1/4W	FUSIBLE	
⚠	R802	QRZ0077-100	10	1/4W	FUSIBLE	
	R803	QRD167J-163	16K	1/6W	CARBON	
	R804	QRD167J-203	20K	1/6W	CARBON	
⚠	R811	QRZ0077-330	33	1/4W	FUSIBLE	
⚠	R812	QRZ0077-330	33	1/4W	FUSIBLE	
	R901	QRD167J-272	2.7K	1/6W	CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R902	QRD167J-272	2.7K	1/6W	CARBON	
	R903	QRD167J-153	15K	1/6W	CARBON	
	R904	QRD167J-153	15K	1/6W	CARBON	
	R905	QRD167J-104	100K	1/6W	CARBON	
	R906	QRD167J-823	82K	1/6W	CARBON	
	R907	QRD167J-223	22K	1/6W	CARBON	
	R908	QRD167J-223	22K	1/6W	CARBON	
	R909	QRD167J-103	10K	1/6W	CARBON	
	R911	QRD167J-473	47K	1/6W	CARBON	
	R916	QRD167J-103	10K	1/6W	CARBON	
	R917	QRD167J-103	10K	1/6W	CARBON	
	R918	QRD167J-224	220K	1/6W	CARBON	
	R919	QRD167J-332	3.3K	1/6W	CARBON	
	R920	QRD167J-273	27K	1/6W	CARBON	
	R921	QRD167J-103	10K	1/6W	CARBON	
⚠	R923	QRD14CJ-820S	82	1/4W	UNF.CARBON	
⚠	R924	QRG022J-122A	1.2K	2W	O.M.FILM	
	R951	QRD167J-224	220K	1/6W	CARBON	
	R952	QRD167J-333	33K	1/6W	CARBON	
	R953	QRD167J-101	100	1/6W	CARBON	

⚠ :SAFETY PARTS

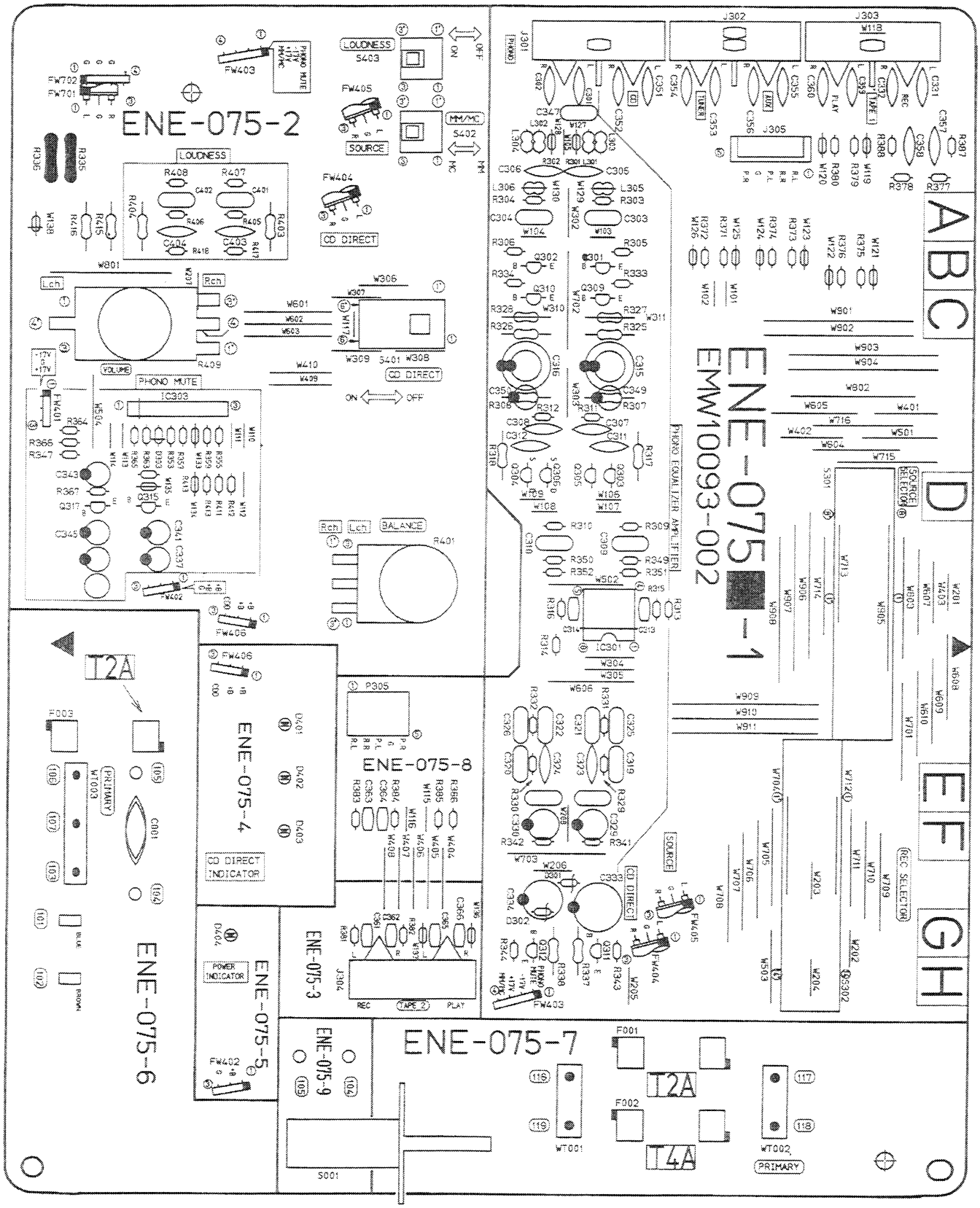
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10092-002	PRINTED BOARD	
		E300209-040	RADIAT.PLATE	
		E305804-001	HOLDER	
		E305805-001	HOLDER	
		E33754-001	TIE BAND	
		E70945-H25	HEAT SINK	
		E73525-001	SPECIAL SCREW	
		E73525-003	SCREW	
		SBSG3008C0	SCREW	
		GBSG3008C0	SCREW	E
		GBSG3008C0	SCREW	F
		EWT011-078	TERMINAL WIRE	G
		EWT011-112	TERMINAL WIRE	G
		E74266-002	SPECIAL SCREW	G
		GBSG3008C0	SCREW	G
		GBSG3008C0	SCREW	H
	J401	EMV7122-103	CONNECTOR(3PIN)	
	J701	EMV7122-10E	CONNECTOR(3PIN)	
	J702	EMV7122-004	CONNECTOR(4PIN)	
	J751	EMB007P-B01C	SPEAKER TERMINAL	
	J752	EMB007P-B01C	SPEAKER TERMINAL	
	J753	QMS6A40-021	HEADPHONE JACK	
	L701	EQL0001-1R0	INDUCTOR	
	L702	EQL0001-1R0	INDUCTOR	
	S701	QST4241-E07	PUSH SWITCH(SPK1)	
	S702	QST4241-E07	PUSH SWITCH(SPK2)	
	EP002	E70859-001	EARTH PLATE	
	EP003	E70859-001	EARTH PLATE	G
	FW501	EWR378-13LST	FLAT WIRE(7PIN)	
	JT501	EMV7122-103	CONNECTOR(3PIN)	
	JT502	EMV7122-004	CONNECTOR(4PIN)	
	RY901	ESK7D24-2120	RELAY	
	WT801	E67764-103	WRAPPING TERMINAL(3PIN)	

⚠ :SAFETY PARTS

■ENE-075 ☐ Source Selector PC Board Ass'y

Note : ENE-075 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENE-075 E	Other Countries
ENE-075 F	Australia , Continental Europe
ENE-075 G	Germany
ENE-075 H BS	the U.K.

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q301	2SD655(E,F)	SILICON	HITACHI	
	Q302	2SD655(E,F)	SILICON	HITACHI	
	Q303	2SK170(BL)	F.E.T	TOSHIBA	
	Q304	2SK170(BL)	F.E.T	TOSHIBA	
	Q305	2SK170(BL)	F.E.T	TOSHIBA	
	Q306	2SK170(BL)	F.E.T	TOSHIBA	
	Q309	2SD655(E,F)	SILICON	HITACHI	
	Q310	2SD655(E,F)	SILICON	HITACHI	
	Q311	2SC2878(A,B)	SILICON	TOSHIBA	
	Q312	2SC2878(A,B)	SILICON	TOSHIBA	
	Q315	DTA114YS	SILICON	ROHM	
	Q317	DTA144ES	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC301	VC4580DD	I.C.	DAINICHI	
	IC303	UPC1237HA	I.C.	NEC	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D301	RD15JSB3	ZENER	NEC	
	D302	RD15JSB3	ZENER	NEC	
	D303	1SS133	SILICON	ROHM	
	D401	SLV-31YC3F	L.E.D.	ROHM	
	D402	SLV-31YC3F	L.E.D.	ROHM	
	D403	SLV-31YC3F	L.E.D.	ROHM	
	D404	SLR-34DC3F	L.E.D.	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	C001	QCZ9050-472A	4700PF		CERAMIC	F
⚠	C001	QCZ9050-472A	4700PF		CERAMIC	G
⚠	C001	QCZ9050-472A	4700PF		CERAMIC	HBS
	C301	QCS21HJ-101	100PF	50V	CERAMIC	G
	C302	QCS21HJ-101	100PF	50V	CERAMIC	G
	C303	QFV81HJ-103	0.01MF	50V	T.FILM	E
	C303	QFV81HJ-103	0.01MF	50V	T.FILM	F
	C303	QFN81HJ-102	1000PF	50V	MYLAR	G
	C303	QFV81HJ-103	0.01MF	50V	T.FILM	HBS
	C304	QFV81HJ-103	0.01MF	50V	T.FILM	E
	C304	QFV81HJ-103	0.01MF	50V	T.FILM	F
	C304	QFN81HJ-102	1000PF	50V	MYLAR	G
	C304	QFV81HJ-103	0.01MF	50V	T.FILM	HBS
	C307	QCS21HJ-101	100PF	50V	CERAMIC	
	C308	QCS21HJ-101	100PF	50V	CERAMIC	
	C309	QFN81HJ-222	2200PF	50V	MYLAR	
	C310	QFN81HJ-222	2200PF	50V	MYLAR	
	C311	QCS21HJ-680	68PF	50V	CERAMIC	E
	C311	QCS21HJ-680	68PF	50V	CERAMIC	F
	C311	QCS21HJ-680	68PF	50V	CERAMIC	HBS
	C312	QCS21HJ-680	68PF	50V	CERAMIC	E
	C312	QCS21HJ-680	68PF	50V	CERAMIC	F
	C312	QCS21HJ-680	68PF	50V	CERAMIC	HBS
	C315	EEZ0602-227	220MF		ELECTRO	
	C316	EEZ0602-227	220MF		ELECTRO	
	C319	QFN81HJ-472	4700PF	50V	MYLAR	
	C320	QFN81HJ-472	4700PF	50V	MYLAR	
	C321	QFN81HJ-153	0.015MF	50V	MYLAR	
	C322	QFN81HJ-153	0.015MF	50V	MYLAR	
	C323	QCS21HJ-331	330PF	50V	CERAMIC	
	C324	QCS21HJ-331	330PF	50V	CERAMIC	
	C325	QFN81HJ-272	2700PF	50V	MYLAR	
	C326	QFN81HJ-272	2700PF	50V	MYLAR	
	C329	EEZ5009-106	10MF		ELECTRO	
	C330	EEZ5009-106	10MF		ELECTRO	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C331	QCS21HJ-101	100PF	50V	CERAMIC	G
	C332	QCS21HJ-101	100PF	50V	CERAMIC	G
	C333	EEZ2505-227	220MF		ELECTRO	
	C334	EEZ2505-107	100MF		ELECTRO	
	C337	QEK51CM-226	22MF	16V	ELECTRO	
	C341	QEK51HM-475	4.7MF	50V	ELECTRO	
	C343	QEK51EM-475G	4.7MF	25V	ELECTRO	
	C345	QEK51HM-106	10MF	50V	ELECTRO	
	C347	QFV81HJ-103	0.01MF	50V	T.FILM	
	C351	QCS21HJ-101	100PF	50V	CERAMIC	G
	C352	QCS21HJ-101	100PF	50V	CERAMIC	G
	C353	QCS21HJ-101	100PF	50V	CERAMIC	G
	C354	QCS21HJ-101	100PF	50V	CERAMIC	G
	C355	QCS21HJ-101	100PF	50V	CERAMIC	G
	C356	QCS21HJ-101	100PF	50V	CERAMIC	G
	C359	QCS21HJ-101	100PF	50V	CERAMIC	G
	C360	QCS21HJ-101	100PF	50V	CERAMIC	G
	C361	QCBB1HK-101	100PF	50V	CERAMIC	G
	C362	QCBB1HK-101	100PF	50V	CERAMIC	G
	C365	QCBB1HK-101	100PF	50V	CERAMIC	G
	C366	QCBB1HK-101	100PF	50V	CERAMIC	G
	C401	QFV81HJ-563	0.056MF	50V	T.FILM	
	C402	QFV81HJ-563	0.056MF	50V	T.FILM	
	C403	QCS21HJ-471	470PF	50V	CERAMIC	
	C404	QCS21HJ-471	470PF	50V	CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-102	1K	1/6W	CARBON	G
	R302	QRD167J-102	1K	1/6W	CARBON	G
	R303	QRD167J-101	100	1/6W	CARBON	
	R304	QRD167J-101	100	1/6W	CARBON	
	R305	QRD167J-103	10K	1/6W	CARBON	
	R306	QRD167J-103	10K	1/6W	CARBON	
	R307	ERD003J-100	10	1/4W	CARBON	
	R308	ERD003J-100	10	1/4W	CARBON	
	R309	QRD167J-680	68	1/6W	CARBON	
	R310	QRD167J-680	68	1/6W	CARBON	
	R311	QRD167J-473	47K	1/6W	CARBON	
	R312	QRD167J-473	47K	1/6W	CARBON	
	R313	QRD167J-472	4.7K	1/6W	CARBON	
	R314	QRD167J-472	4.7K	1/6W	CARBON	
	R315	QRD167J-472	4.7K	1/6W	CARBON	
	R316	QRD167J-472	4.7K	1/6W	CARBON	
	R317	ERD003J-472	4.7K	1/4W	CARBON	
	R318	ERD003J-472	4.7K	1/4W	CARBON	
	R325	ERD003J-180	18	1/4W	CARBON	
	R326	ERD003J-180	18	1/4W	CARBON	
	R327	ERD003J-221	220	1/4W	CARBON	
	R328	ERD003J-221	220	1/4W	CARBON	
	R329	QRD167J-153	15K	1/6W	CARBON	
	R330	QRD167J-153	15K	1/6W	CARBON	
	R331	QRV144F-1913A	191K	1/4W	M.FILM	
	R332	QRV144F-1913A	191K	1/4W	M.FILM	
	R333	QRD167J-103	10K	1/6W	CARBON	
	R334	QRD167J-103	10K	1/6W	CARBON	
⚠	R335	QRZ0077-101	100	1/4W	FUSIBLE	
⚠	R336	QRZ0077-181	180	1/4W	FUSIBLE	
	R337	ERD003J-471	470	1/4W	CARBON	
	R338	ERD003J-471	470	1/4W	CARBON	
	R342	QRD167J-104	100K	1/6W	CARBON	
	R342	QRD167J-104	100K	1/6W	CARBON	
	R343	QRD167J-103	10K	1/6W	CARBON	
	R344	QRD167J-103	10K	1/6W	CARBON	
	R347	QRD167J-474	470K	1/6W	CARBON	
	R349	QRD167J-125	1.2M	1/6W	CARBON	
	R350	QRD167J-125	1.2M	1/6W	CARBON	
	R351	QRD167J-125	1.2M	1/6W	CARBON	
	R352	QRD167J-125	1.2M	1/6W	CARBON	
	R353	QRD167J-472	4.7K	1/6W	CARBON	
	R355	QRD167J-392	3.9K	1/6W	CARBON	
	R357	QRD167J-152	1.5K	1/6W	CARBON	
	R359	QRD167J-473	47K	1/6W	CARBON	
	R363	QRD167J-104	100K	1/6W	CARBON	
	R364	QRD167J-104	100K	1/6W	CARBON	
	R365	QRD167J-104	100K	1/6W	CARBON	
	R366	QRD167J-474	470K	1/6W	CARBON	
	R367	QRD167J-473	47K	1/6W	CARBON	
	R371	QRD167J-474	470K	1/6W	CARBON	
	R372	QRD167J-474	470K	1/6W	CARBON	
	R373	QRD167J-474	470K	1/6W	CARBON	
	R374	QRD167J-474	470K	1/6W	CARBON	
	R375	QRD167J-474	470K	1/6W	CARBON	
	R376	QRD167J-474	470K	1/6W	CARBON	
	R377	QRD167J-105	1M	1/6W	CARBON	
	R378	QRD167J-105	1M	1/6W	CARBON	
	R379	QRD167J-474	470K	1/6W	CARBON	
	R380	QRD167J-474	470K	1/6W	CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R381	QRD167J-331	330	1/6W	CARBON	
	R382	QRD167J-331	330	1/6W	CARBON	
	R383	QRD167J-105	1M	1/6W	CARBON	
	R384	QRD167J-105	1M	1/6W	CARBON	
	R385	QRD167J-474	470K	1/6W	CARBON	
	R386	QRD167J-474	470K	1/6W	CARBON	
	R387	QRD167J-331	330	1/6W	CARBON	
	R388	QRD167J-331	330	1/6W	CARBON	
	R401	QVDB87M-EF5B	250K		VARIABLE	
	R403	ERD003J-103	10K	1/4W	CARBON	
	R404	ERD003J-103	10K	1/4W	CARBON	
	R405	QRD167J-623	62K	1/6W	CARBON	
	R406	QRD167J-623	62K	1/6W	CARBON	
	R407	QRD167J-474	470K	1/6W	CARBON	
	R408	QRD167J-474	470K	1/6W	CARBON	
	R409	QVDB90B-E15B	100K		VARIABLE	
	R411	QRD167J-331	330	1/6W	CARBON	
	R412	QRD167J-331	330	1/6W	CARBON	
	R413	QRD167J-681	680	1/6W	CARBON	
	R414	QRD167J-511	510	1/6W	CARBON	
	R415	ERD003J-221	220	1/4W	CARBON	
	R416	ERD003J-221	220	1/4W	CARBON	
	R417	QRD167J-333	33K	1/6W	CARBON	
	R418	QRD167J-333	33K	1/6W	CARBON	

⚠ : SAFETY PARTS

Others

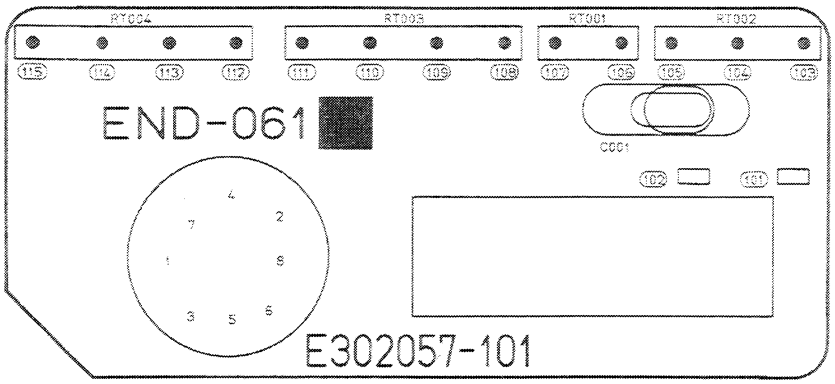
⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-002	FUSE CLIP	E
		EMG7331-002U	FUSE CLIP	E
		EMW10093-002	PRINTED BOARD	E
		EMG7331-002	FUSE CLIP	F
		EMG7331-002U	FUSE CLIP	F
		EMW10093-002	PRINTED BOARD	F
		E65508-002	TAB	F
		EMG7331-002	FUSE CLIP	G
		EMG7331-002U	FUSE CLIP	G
		EMW10093-002	PRINTED BOARD	G
		E65508-002	TAB	G
		EMG7331-002	FUSE CLIP	HBS
		EMG7331-002U	FUSE CLIP	HBS
		EMW10093-002BS	PRINTED BOARD	HBS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E65508-002	TAB	HBS
	F001	E67132-T2R5	FUSE LABEL	E
	F002	E67132-T5R0	FUSE LABEL	E
	F003	E67132-T2R5	FUSE LABEL	F
	F003	E67132-T2R5	FUSE LABEL	G
	F003	E67132-T2R5	FUSE LABEL	HBS
	J301	EMN00TV-406A	4P PIN JACK	
	J302	EMN00TV-404A	4P PIN JACK	
	J303	EMN00TV-404A	4P PIN JACK	
	J304	EMN00TV-404A	4P PIN JACK	
	J305	EMV5125-005	PLUG ASSY(5PIN)	
	L301	EQL4004-330	INDUCTOR	G
	L302	EQL4004-330	INDUCTOR	G
	L303	EQL4004-330	INDUCTOR	G
	L304	EQL4004-330	INDUCTOR	G
	P305	EMV7125-005R	CONNECTOR(5PIN)	
⚠	S001	QSP1106-004	POWER SWITCH	E
⚠	S001	QSP1106-004	POWER SWITCH	F
⚠	S001	QSP1106-004	POWER SWITCH	G
⚠	S001	QSP4C11-E03BS	PUSH SWITCH	HBS
	S301	QSS1R26-E01	SLIDE SWITCH(SOURCE SELECT)	
	S302	QSS1R46-E01	SLIDE SWITCH(REC SELECT)	
	S401	QSTL101-E04	PUSH SWITCH(CD DIRECT)	
	S402	QSTL241-E03	PUSH SWITCH(MM/MC)	
	FW401	EWR33B-13LST	FLAT WIRE(3PIN)	
	FW402	EWR33B-16SST	FLAT WIRE(3PIN)	
	FW403	EWR34B-30SST	FLAT WIRE(4PIN)	
	FW404	EWR23C-25NN	FLAT WIRE(3PIN)	
	FW405	EWR23C-25NN	FLAT WIRE(3PIN)	
	FW406	EWR33B-13SST	FLAT WIRE(3PIN)	
	FW701	EWR23C-16LN	FLAT WIRE(3PIN)	
	FW702	EWR34B-16LST	FLAT WIRE(4PIN)	
	WT001	E67764-202	WRAPPING TERMINAL(2PIN)	E
	WT002	E67764-202	WRAPPING TERMINAL(2PIN)	E
	WT003	E67764-203	WRAPPING TERMINAL(3PIN)	F
	WT003	E67764-203	WRAPPING TERMINAL(3PIN)	G
	WT003	E67764-203	WRAPPING TERMINAL(3PIN)	HBS

⚠ : SAFETY PARTS

■ END-061 [B] Voltage Selector PC Board Ass'y (Only for Other Countries)



Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
⚠	C001	QCZ9018-103	0.01MF	CERAMIC	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E302057-101	CIRCUIT BOARD	
		E65508-002	TAB	
		E67764-302	WRAPPING TERMINAL	
		E67764-303	WRAPPING TERMINAL	
		E67764-304	WRAPPING TERMINAL	
⚠		QMC0637-004	AC OUTLET	
⚠		QSR0085-018	VOLTAGE SELECTOR	

⚠ : SAFETY PARTS

Accessories List

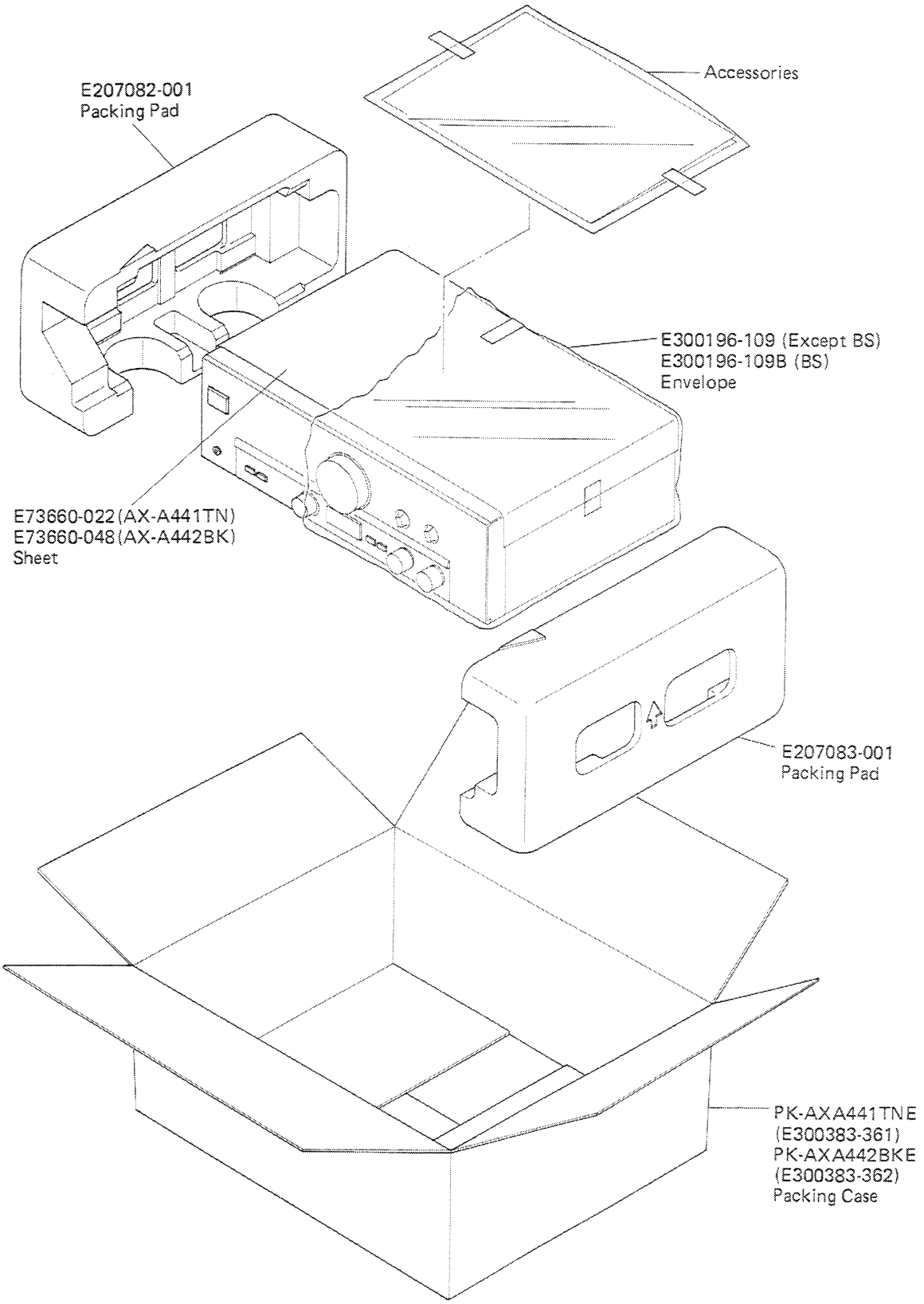
⚠	Part Number	Part Name	Q'ty	Description	Areas
	E30580-1712A	Instruction Book	1		U, A, E, EF, G
	E30580-1712ABS	Instruction Book	1		BS
	E30580-1717A	Instruction Book	1		E, EF
	BT-20117	Warranty Card	1		G
	BT20060	Warranty Card	1		BS
	BT-20122	Warranty Card	1		A
	BT-20122-1	Sticker	1		A
	BT20066A	EEC Agency	1		BS
	E43486-340A	Safety Sheet	1		BS
	QZL1008-001	FTZ Information Sheet	1		G
⚠	E04056	Siemens Plug	1		U
	E35497-019	Caution Sheet	1	220V	U
	E41202-2	Envelope	1		Except BS
	E41202-2B	Envelope	1		BS

⚠: Safety Parts

The Marks Designated Areas

A·····Australia
G·····Germany
E, EF·····Continental Europe
BS·····the U.K.
U·····Other Countries
No mark indicates all areas.

Packing Materials and Part Numbers



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